## DRAFT

# STATUTORY INSTRUMENTS

# S. I. No. of 2010

Safety, Health and Welfare at Work (General Application)(Amendment)(No. 3) Regulations 2010

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## SAFETY, HEALTH AND WELFARE AT WORK (GENERAL APPLICATION) (AMENDMENT)(NO. 3) REGULATIONS 2010

I, ....., Minister of State at the Department of Enterprise, Trade and Innovation, in exercise of powers conferred on me by section 58 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005) (as adapted by the Enterprise, Trade and Employment (Alteration of Name of Department and Title of Minister) Order 2010 (S.I. No. 185 of 2010)) and the Enterprise, Trade and Innovation (Delegation of Ministerial Functions) (No. 2) Order 2010 (S.I. No. 333 of 2010), and for the purpose of giving effect to Directive 2009/104/EC<sup>1</sup> of the European Parliament and of the Council of 16 September 2009 concerning the minimum safety and health requirements for the use of work equipment by workers at work (codified version), after consultation with the Health and Safety Authority, hereby make the following Regulations:

1. (1) These Regulations may be cited as the Safety, Health and Welfare at Work (General Application) (Amendment)(No. 3) Regulations 2010.

(2) In these Regulations "Principal Regulations" means the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007) as amended by the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2007 (S.I. No. 732 of 2007) and the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2010 (S.I. No. 176 of 2010).

(3) The Principal Regulations and these Regulations may be cited together as the Safety, Health and Welfare at Work (General Application) Regulations 2007 to 2010.

- (4) These Regulations come into operation on ...... 2010.
- 2. The Principal Regulations are amended by
  - (a) substituting at 55 under the "Arrangement of Regulations" the following:

"55. Safe working loads for excavators, loaders or combined excavators and loaders when used for object handling.", and

(b) substituting for Chapter 2, Use of Work Equipment, Regulations 27 to 61, the following:

"Chapter 2— Use of Work Equipment

**Interpretation for Chapter 2.** 27. In this Chapter:

<sup>&</sup>lt;sup>1</sup> OJ No. L260, 3.10.2009, p. 5

"carrier" means the device by which persons or goods, or both, are supported in order to be lifted, lowered or moved;

"danger zone" means any zone within or around work equipment in which an employee is subject to a risk to his or her safety or health;

"EC declaration of conformity" refers to a declaration of conformity issued pursuant to Directive  $98/37/EC^2$  or Directive  $2006/42/EC^3$  of the European Parliament and of the Council on the approximation of the laws of the Member States relating to machinery;

"exposed employee" means any employee wholly or partially in a danger zone;

"fishing vessel" means a vessel to which the Safety, Health and Welfare at Work (Fishing Vessels) Regulations 1999 (S.I. No. 325 of 1999) apply;

'hoist or lift' means a lifting machine which has its direction of movement restricted by a guide or guides but, for the purpose of this Chapter, does not include—

(a) a fork lift truck, order picker, self-propelled variable reach truck or similar type equipment,

(b) platform lifts for use by persons with impaired mobility,

(c) lifting equipment intended for lifting performers during artistic performances, or

(d) lifting equipment fitted in means of transport;

"lifting accessories" include clamps and similar attachments, chain slings, rope slings, rings, hooks, shackles, swivels, spreader beams, spreader frames and any other item placed between lifting equipment and the load or on the load in order to attach it, but excluding features of the load used for its lifting;

"load" includes a person;

"non-integrated cage or basket" means one which is not equipped with controls that control its movement;

"selection, installation and use of work equipment" means any activity involving work equipment, including starting or stopping the equipment, its use, transport, repair, modification, maintenance and servicing and cleaning;

"thorough examination" includes testing if-

<sup>&</sup>lt;sup>2</sup> OJ No. L207, 23.7.98, p. 1

<sup>&</sup>lt;sup>3</sup> OJ No. L157, 9.6.2006, p. 24

(a) a competent person considers it to be necessary for the purpose of the examination, or

(b) testing is required pursuant to Regulation 52 and Schedule 1.

#### Duties of employer, use of work equipment.

28. An employer shall ensure that—

(a) any work equipment provided for use by employees at a place of work complies, as appropriate, with the provisions of any relevant enactment implementing any relevant Directive of the European Communities relating to work equipment with respect to safety and health,

(b) in selecting the work equipment, account is taken of the specific working conditions, characteristics and hazards in the place of work having regard to the safety and health of the employees and any additional hazards posed by the use of such work equipment,

(c) the necessary measures are taken so that the work equipment is installed and located and is suitable for the work to be carried out, or is properly adapted for that purpose, and may be used by employees without risk to their safety and health,

(d) where it is not possible fully to ensure that work equipment can be used by employees without risk to their safety or health, appropriate measures are taken to minimise any such risk,

(e) sufficient space to reduce such risks is provided between moving parts of work equipment and fixed or moving parts in its environment,

(f) where the use of work equipment is likely to involve a specific risk to the safety or health of employees—

(i) the use of such work equipment is restricted to those employees required to use it, and

(ii) in cases of work involving repairs, modifications, maintenance or servicing of such work equipment, the employees concerned are competent to carry out such work,

(g) the working posture and position of employees while using work equipment, and any ergonomic requirements, are taken into account having regard to the safety and health of the employees,

(h) areas and points for working on, or maintenance of, work equipment are suitably lit having regard to the operation to be carried out,

(i) work equipment parts at high or very low temperature are, where appropriate, protected to avoid the risk of employees coming into contact or coming too close,

(j) work equipment bears warnings and markings essential to ensure the safety and health of employees,

(k) employees have safe means of access to, and egress from, and are able to remain safely in, all the areas necessary for production, adjustment and maintenance operations,

(1) work equipment is used only for operations and under conditions for which it is appropriate,

(m) all work equipment is appropriate for protecting employees against the risk of the work equipment catching fire or overheating, or of discharges of gas, dust, liquid, vapour or other substances produced, used or stored in the work equipment,

(n) all work equipment is appropriate for preventing the risk of explosion of the work equipment or of substances produced, used or stored in the work equipment,

(o) work equipment is erected or dismantled under safe conditions in particular observing any instructions which may have been provided by the manufacturer,

(p) work equipment which may be struck by lightning while being used is protected by devices or appropriate means against the effects of lightning, and

(q) all forms of energy, substances and articles used or produced with work equipment are supplied or removed in a safe manner.

# Information and instruction.

29. An employer shall ensure that—

(a) the necessary measures are taken so that employees have at their disposal adequate information and, where appropriate, written instructions on the work equipment containing at least adequate safety and health information concerning

(i) the conditions of use of work equipment,

(ii) foreseeable abnormal situations, and

(iii) the conclusions to be drawn from experience, where appropriate, in using such work equipment, and

(b) employees are made aware of safety and health risks relevant to them associated with work equipment located at or near their workstation or to any changes relating to that work equipment, even if they do not use the equipment.

## Inspection of work equipment.

30. An employer shall ensure that—

(a) where the safety of work equipment depends on the installation conditions—

(i) an initial inspection is carried out after installation is completed and before it is first put into service, and

(ii) an inspection is carried out after assembly at any new site or in any new location, and that the work equipment is installed correctly and is operating properly,

(b) in the case of work equipment which is exposed to conditions causing deterioration liable to result in a danger to safety or health—

(i) periodic inspections and, where appropriate, testing is carried out,

(ii) special inspections are carried out when exceptional circumstances arise which are liable to make the work equipment unsafe, including modification work, accidents, natural phenomena or prolonged inactivity, and

(iii) deterioration is detected and remedied in good time,

(c) inspections carried out under paragraphs (a) and (b) are carried out by a competent person and are appropriate to the nature, location and use of the work equipment,

(d) the results of inspections carried out under paragraphs (a) and (b) are recorded and kept available for 5 years from the date of inspection, for inspection by an inspector, and access to these records is made available to users of the work equipment upon request, and

(e) when work equipment is used in another place of work, it is accompanied by evidence of the last inspection carried out under paragraphs (a) and (b).

#### Maintenance.

31. An employer shall ensure that—

(a) throughout its working life work equipment is kept, by means of adequate maintenance, at a level such that it complies with the provisions of this Chapter,

(b) where possible, maintenance operations are carried out when work equipment is shut down, and where this is not possible, appropriate protection measures are taken for the carrying out of such operations or such operations are carried out outside the area of danger,

(c) work equipment is maintained in such a way as to reduce the risks to users of the work equipment and to other persons at work, and

(d) a maintenance log for any machine is kept up to date.

## **Control devices.**

32. (1) An employer shall ensure that—

(a) work equipment control devices which affect safety and health are clearly visible and identifiable and appropriately marked where necessary,

(b) control devices are located outside danger zones except where necessary,

(c) the operation of control devices cannot cause additional hazard,

(d) the operation of control devices cannot give rise to any hazard as a result of any unintentional operation,

(e) the absence of persons in the danger zones is verifiable from the main control position if necessary,

(f) where it is impracticable to comply with paragraph (e), a safe system such as an audible or visible warning signal, or such a signal that is both audible and visible, is given automatically whenever the machinery is about to start,

(g) an exposed employee has the time and means quickly to avoid hazards caused by the starting or stopping, or both, of the work equipment,

(h) control systems are safe, and are chosen making appropriate allowances for the failures, faults and constraints to be expected in the planned circumstances of use,

(i) it is possible to start work equipment only by deliberate action on a control provided for the purpose,

(j) a control is included in work equipment to—

(i) restart it after a stoppage for whatever reason, and

(ii) to control a significant change in the operating conditions

unless such a restart or change does not subject exposed employees to any hazard,

(k) all work equipment is fitted with a control to stop it completely and safely,

(1) each workstation is fitted with a control to stop some or all of the work equipment, depending on the type of hazard, so that the equipment is in a safe state,

(m) the equipment's stop control has priority over the start controls and, when the work equipment or the dangerous parts of it have stopped, the energy supply of the actuators concerned is switched off, and

(n) where appropriate, and depending on the hazards the equipment presents and its normal stopping time, work equipment is fitted with an emergency stop device.

(2) Paragraph (1)(j) does not apply to restarting or a change in operating conditions as a result of a normal operating cycle of an automatic device.

#### Guards and protection devices.

33. An employer shall ensure that-

(a) work equipment presenting risk due to falling objects or projections is fitted with appropriate safety devices corresponding to the risk,

(b) work equipment presenting hazards due to emissions of gas, vapour, liquid or dust is fitted with appropriate containment devices, extraction devices, or both, near the sources of the hazard,

(c) work equipment and parts of such equipment are, where necessary for the safety and health of employees, stabilised by clamping or some other means,

(d) where there is a risk of rupture or disintegration of parts of work equipment, likely to pose significant danger to the safety and health of employees, appropriate protection measures are taken,

(e) where there is a risk of physical contact with moving parts of work equipment which could lead to accidents, those parts are provided with guards or protection devices to prevent access to danger zones or to halt movement of dangerous parts before the danger zones are reached, (f) guards and protection devices where required under subparagraph (e)-

(i) are of robust construction,

(ii) do not give rise to any additional hazard,

(iii) are not easily removed or rendered inoperative,

(iv) are situated at sufficient distance from the danger zone,

(v) do not restrict more than necessary the view of the operating cycle of the equipment,

(vi) allow operations necessary to fit or replace parts, and

(vii) restrict access for maintenance work only to the area where the work is to be carried out, if possible, without removal of the guard or protection device,

(g) warning devices on work equipment are unambiguous and easily perceived and understood, and

(h) any part of a stock-bar which projects beyond the headstock of a lathe is securely fenced unless it is in such a position as to be safe to employees as it would be if securely fenced.

#### Connection to energy sources.

34. An employer shall ensure that—

(a) all work equipment is fitted with clearly identifiable means to isolate it from all its energy sources, and

(b) the reconnecting of the work equipment to its energy sources poses no risk to the employees concerned.

#### Contact with wheels or tracks of mobile work equipment.

35. An employer shall ensure that work equipment with ride-on employees is fitted out in such a way as to reduce the risks for employees during the journey, including risk of contact with or trapping by wheels or tracks.

#### Drive systems of mobile work equipment.

36. An employer shall ensure that—

(a) where an inadvertent seizure of the drive unit between an item of mobile work equipment and its accessories or anything towed creates a specific risk, the work equipment is equipped or adapted to prevent blockages of the drive units and where such seizure cannot be avoided, every possible measure is taken to avoid any adverse effects on employees, and

(b) where drive shafts for the transmission of energy between mobile items of work equipment can become soiled or damaged by trailing on the ground, facilities are available for fixing them.

#### Combustion engines of mobile work equipment.

37. An employer shall ensure that mobile work equipment with a combustion engine is not used in working areas unless –

(a) specific provision is made for conducting the exhaust gases from the engine into the open air, or

(b) the working area is adequately ventilated so as to prevent danger to health from the exhaust gases.

#### **Roll-over of mobile work equipment.**

38. (1) An employer shall ensure that mobile work equipment with ride-on employees is designed to restrict, under actual conditions of use, the risks arising from roll over of work equipment either by—

(a) a protection structure to ensure that the equipment does not tilt by more than a quarter turn,

(b) a structure giving sufficient clearance around the ride-on employees if the tilting movement can continue beyond a quarter turn, or

(c) by some other device of equivalent effect.

(2) The protection structures referred to in paragraph (1) may be an integral part of the work equipment but are not required when the work equipment is stabilised during operation or where the design makes roll over impossible.

(2) An employer shall ensure that where there is a risk of a ride-on employee being crushed between parts of the work equipment and the ground should the equipment roll over a restraining system for the ride-on employees is installed.

#### Fork-lift trucks.

39. An employer shall ensure that a fork-lift truck carrying one or more employees is equipped or adapted to limit the risk of it overturning—

(a) by the installation of an enclosure for the driver,

(b) by a structure preventing the fork-lift truck from overturning,

(c) by a structure ensuring that, if the fork-lift truck overturns, sufficient clearance remains between the ground and appropriate parts of the fork-lift truck for the employees, or

(d) by a structure restraining the employees on the driving seat so as to prevent them from being crushed by parts of the fork-lift truck which overturns.

#### Safety of self-propelled work equipment.

40. An employer shall ensure that—

(a) self-propelled work equipment is operated only by competent persons who have been appropriately trained, and

(b) self-propelled work equipment, which when in motion may create risks for persons—

(i) has facilities for preventing unauthorised start-up;

(ii) has appropriate facilities for minimising the consequences of a collision where there is more than one item of track-mounted work equipment in motion at the same time;

(iii) has a device for braking and stopping equipment;

(iv) in the event of failure of the main facility for braking and stopping equipment, where safety constraints so require, has available emergency facilities operated by readily accessible controls or automatic systems for braking and stopping the equipment;

(v) has adequate auxiliary devices installed to improve visibility where the driver's direct field of vision is inadequate;

(vi) is equipped with lighting appropriate to the work to be carried out and ensures sufficient safety for employees where designed for use at night or in dark places;

(vii) is equipped with appropriate fire-fighting appliances where such appliances are not available sufficiently nearby at the place of use, where such work equipment constitutes a fire hazard, either on its own or in respect of whatever it is towing or carrying and is liable to endanger employees;

(viii) if remote-controlled, stops automatically once it leaves the control range;

(ix) if it

(I) is remote-controlled, and

(II) creates, in normal conditions a crushing or impact hazard,

has facilities to guard against that hazard, unless other appropriate devices are present to control the hazard.

# Traffic rules for mobile work equipment.

41. An employer shall ensure that—

(a) if work equipment is moving around in a work area, appropriate traffic rules are drawn up and followed,

(b) organisational measures are taken to prevent employees on foot coming within the area of operation of self-propelled work equipment and, if work can be done properly only if employees on foot are present, appropriate measures are taken to prevent them from being injured by the equipment, and

(c) the transport of employees on mechanically driven mobile work equipment is only permitted where safe facilities are provided to this effect and if work is carried out during the journey, speeds are adjusted as necessary.

# Work equipment for lifting loads.

42. An employer shall ensure that-

(a) all lifting operations are properly planned, appropriately supervised and carried out to protect the safety of employees,

(b) when work equipment for lifting loads is installed permanently, its strength and stability during use is ensured, having regard to the loads to be lifted and the stress induced at the mounting or fixing points of the structure,

(c) lifting equipment designed for low frequency use is not installed where its anticipated use will render the equipment unsuitable,

(d) machinery for lifting loads is clearly marked to indicate its safe working load and, where appropriate, is fitted with a load plate giving the safe working load for each configuration of the machinery,

(e) work equipment which is not designed for lifting persons is appropriately and clearly marked to this effect,

(f) every drum or pulley round which the chain or wire rope of any lifting equipment is carried is of suitable diameter and construction for the chain or rope used,

(g) every chain or rope which terminates at the winding drum of any lifting equipment is properly secured thereto and at least two turns of such chains or rope remain on such drum in every operating position of the equipment,

(h) permanently installed work equipment is installed in such a way as to reduce the risk of the load—

- (i) striking employees,
- (ii) unintentionally drifting dangerously or falling freely, and
- (iii) being released unintentionally,

(i) work equipment which is mobile or can be dismantled and which is designed for lifting loads is used in such a way as to ensure the stability of the work equipment during use under all foreseeable conditions, taking into account the nature of the ground,

(j) lifting equipment is not used beyond its safe working load except when being tested under the direction of a competent person,

(k) unless required for the effective operation of the work, measures are taken to ensure that employees are not present under suspended loads,

(1) loads are not moved above unprotected workplaces usually occupied by employees, and

(m) if the hazards referred to in paragraphs (k) and (l) cannot be avoided, appropriate procedures are laid down and applied where work cannot be carried out properly any other way.

## Cranes.

43. (1) An employer shall ensure that, without prejudice to Regulations 42 and 45,

(a) every crane of variable operating radius, before it is taken into use—

(i) has plainly marked upon it or within the cab the safe working load at various radii of the jib, trolley or crab, and in the case of a crane with a derricking jib, the maximum radius at which the jib may be worked,

(ii) is fitted with a suitable accurate automatic safe load indicator or rated capacity indicator, clearly visible to the driver showing at any time

the radius of the jib, trolley or crab and the safe working load corresponding to that radius unless-

(I) it is a guy derrick crane (being a crane of which the mast is held upright solely by means of ropes with the necessary fittings and tightening screws),

(II) it is a hand crane which is being solely used for erecting or dismantling another crane, or

(III) it has been assigned by a competent person a safe working load of 1,000 kg or less, and

(iii) has an automatic safe load indicator or rated capacity indicator, if required under subparagraph (ii), which is—

(I) properly maintained,

(II) correctly used, and

(III) tested by a competent person after erection, installation or alteration of the crane for the purpose of any work before the crane is taken into use or returned to use as the case may be,

(b) in the case of a crane which is on occasion dismantled or partially dismantled any jib or boom which is separated from the crane in dismantling is clearly marked so as to indicate the crane of which it is a part,

(c) cranes with derricking jibs are provided with—

(i) such means as will minimise the risk of the accidental raising or lowering of the jib, and

(ii) a jib that does not exceed the maximum radius specified by the manufacturer, or by a competent person in a report pursuant to Regulation 53,

(d) a crane travelling on rails is provided with deflector plates to remove from the rails any loose material likely to cause danger,

(e) where the safety of work equipment depends on the installation conditions on a construction site—

(i) after each assembly of a tower crane or after any adjustment to any member which may affect the strength or stability of the crane, and before it is put into use, it is subject to a static test with a test coefficient of 1.25 and

a dynamic test with a test coefficient of 1.1, taking account of any direction from the machine manufacturer, and

(ii) where the stability of a crane is secured by means of removable weights, a diagram or notice indicating the amount and position of such weights is affixed on the crane so that it can be readily seen and each such removable weight is clearly marked with its correct weight, and

(f) notwithstanding any other provisions of this Chapter, lifting equipment used on a construction site is examined weekly by the user as regards features related to its safe working and a record of the results is kept in a suitable form which is kept available for inspection by an inspector for 3 months from the date of examination.

(2) The use of an excavator, telehandler, loader or combined excavator/loader as a crane is subject to Part C of Schedule 1.

## Support of lifting equipment.

44. An employer shall ensure that every platform or support, whether fixed or mobile, upon or from which lifting equipment is mounted or supported is suitable for the purpose.

# Work equipment for lifting goods or persons.

45. An employer shall ensure that-

(a) persons may be lifted only by means of work equipment and accessories suitable for this purpose, and

(b) work equipment for lifting or moving persons or for lifting goods is, where applicable, provided such as to—

(i) prevent the risk of the carrier falling, where one exists, by the use of suitable devices,

(ii) prevent the risk of the user falling from the carrier, where one exists,

(iii) prevent the risk of persons being crushed, trapped or struck, in particular through inadvertent contact with objects,

(iv)where the carrier has a roof, be equipped with a suitable inspection control station and stopping device,

(v) where, in respect of a carrier with a roof, a hazard exists by virtue of the free distance in the horizontal plane beyond and perpendicular to the carrier's outer edge exceeding 0.30 m, measures to address the hazard, and

(vi) ensure that persons trapped in the carrier in the event of an incident are not exposed to danger, can raise the alarm and can be freed, and

(c) where, for reasons inherent in the site and height differences, the risks referred to in subparagraph (b)(i) cannot be avoided by other safety measures, an enhanced safety coefficient suspension rope is installed and checked every working day.

#### Hoists and lifts.

46. (1) Without prejudice to Regulations 42 and 45, this Regulation applies to a hoist, lift, hoistway or liftway subject to the conditional exemptions under Part A of Schedule 1.

(2) An employer shall ensure that—

(a) every hoistway or liftway is efficiently protected by a substantial enclosure fitted with gates so as to prevent, when the gates are shut,

(i) any person falling down the way, or

(ii) coming into contact with any moving part of the hoist or lift,

(b) any gate referred to in subparagraph (a) is fitted with efficient interlocking or other devices to ensure that the gate cannot be opened except when the carrier is at the landing and that the carrier cannot be moved away from the landing until the gate is closed,

(c) every hoist or lift and every such enclosure as is referred to in subparagraph (a) is constructed so as to prevent any part of any person or any goods carried in the hoist or lift being trapped between—

(i) any part of the hoist or lift and any fixed structure, or

(ii) between the counterbalance weight and any other moving part of the hoist or lift,

(d) efficient devices which will support the carrier together with its safe working load in the event of failure of the hoisting system are provided and maintained, where practicable, in connection with every hoist or lift,

(e) efficient automatic devices are provided and maintained in connection with every hoist or lift which will ensure that the carrier does not overrun the highest point set for its intended travel, (f) every hoist or lift is installed so that it can be operated at any one time only from one position and is not operated from the carrier unless the requirements of subparagraph (h) are complied with,

(g) the carrier bears an easily visible plate clearly showing the rated load in kilograms and, if applicable, the maximum number of passengers which may be carried, and

(h) in the case of hoists and lifts used for carrying persons, whether together with goods or otherwise,

(i) efficient automatic devices are provided and maintained to prevent the carrier overrunning,

(ii) every carrier on each side from which access is afforded to a landing is fitted with a gate and, in connection with every such gate, efficient devices are provided to secure that, when persons or goods are in the carrier, the carrier cannot be raised or lowered unless the gate is closed and comes to rest when the gate is opened,

(ii) in the case of a hoist or lift where the carrier is suspended by rope or chain, there are at least two ropes or chains separately connected to the carrier, each rope or chain and its attachments being capable of carrying the whole weight of the carrier and its maximum working load,

(iv) efficient devices are provided and maintained which will support the carrier with its maximum working load in the event of a breakage of the ropes or chains or any of their attachments, and

(v) suitable efficient automatic devices are provided which will ensure that the carrier comes to rest at a point above the lowest point to which the carrier can travel.

(3) This Regulation applies to a hoist, lift, hoistway or liftway, subject to the conditional exemptions under Part A of Schedule 1, and any reference to a gate includes reference to a door where the context so requires.

(4) An employer shall ensure that hoists or lifts or hoistways or liftways of a class or description specified in Part A of Schedule 1 are subject to the conditions set out therein

#### Winch-operated hoists and lifts.

47. An employer shall ensure that-

(a) where a hoist or lift is operated by means of a winch, the winch is so constructed that the brake is applied when the control device is not held in the operating position, and

(b) a hoist is not operated by a winch where it is fitted with a pawl and ratchet gear on which the pawl has to be disengaged before the carrier can be lowered.

### Conditions regarding lifting of persons.

48. (1) An employer shall ensure that work equipment not specifically designed for the purpose of lifting persons is not used for that purpose other than in exceptional circumstances and subject to the following conditions:

(a) appropriate action including adequate supervision is taken to ensure safety;

(b) while employees are on work equipment designed for lifting loads, the control position is manned at all times;

(c) persons being lifted have reliable means of communication;

(d) in the event of danger, there is reliable means of evacuating persons from lifting equipment;

(e) the ground underneath the equipment is even and reasonably flat;

(f) the equipment is stable under all circumstances;

(g) persons in a nonintegrated cage or basket cannot reach the controls or other dangerous parts of the lifting machine;

(h) the cage/basket is properly secured to the lifting machine;

(i) the total load is less than half the rated capacity of the lifting equipment;

(j) the lifting equipment has a capacity not less than 1,000 kg unless its manufacturer indicates that the machine is suitable for such use;

(k) hydraulically-operated machines are fitted with check valves on the hydraulic lifting cylinders, or some other suitable device, to prevent a gravity fall of the load in the event of a hydraulic failure.

(2) An employer shall ensure that lifting equipment with provision for free fall is not used to lift persons.

#### Lifting accessories.

49. An employer shall ensure that—

(a) lifting accessories are selected by reference to the loads to be handled, gripping points, attachment tackle and the atmospheric conditions, having regard to the mode and configuration of slinging,

(b) lifting accessories are stored in a way that ensures that they will not be damaged or degraded, and

(c) lifting accessories are marked in such a way that it is possible to identify the characteristics essential for safe use, having regard to Regulation 57.

#### Work equipment for lifting non-guided loads.

50. An employer shall ensure that—

(a) when two or more items of work equipment used for lifting non-guided loads are installed or erected on a site in such a way that their working radii overlap, appropriate measures are taken to avoid collision between loads or the work equipment parts themselves, or both,

(b) when using mobile work equipment for lifting non-guided loads,

(i) measures are taken to prevent the equipment from tilting, overturning or, if necessary, moving or slipping, and

(ii) checks are made to ensure that the measures are executed properly,

(c) if the operator of work equipment designed for lifting non-guided loads cannot observe the full path of the load either directly or by means of auxiliary equipment providing the necessary information,

(i) a competent person is in communication with the operator to guide him or her, and

(ii) organisational measures are taken to prevent collisions of the load which could endanger employees,

(d) work is organised in such a way that, when an employee is attaching or detaching a load by hand, it can be done safely, in particular through the employee retaining direct or indirect control of the work equipment,

(e) if a load has to be lifted by two or more pieces of work equipment for lifting non-guided loads simultaneously, a procedure is established and applied to ensure good co-ordination on the part of the operators,

(f) if work equipment designed for lifting non-guided loads cannot maintain its hold on the load in the event of a complete or partial power failure, appropriate measures are taken to avoid exposing employees to any resultant risks, (g) suspended loads are not left without surveillance unless access to the danger zone is prevented and the load has been safely suspended and is safely held,

(h) open air use of work equipment designed for lifting non-guided loads is halted when meteorological conditions deteriorate to the point of jeopardising the safe use of the equipment and exposing employees to risks, and

(i) adequate protection measures, in particular measures to avoid work equipment turning over, are taken to avoid any risks to employees.

## Lifting equipment—signalling and operation.

51. An employer shall ensure that—

(a) lifting equipment is operated by a competent person or by a person who is under the direct supervision of a competent person for the purpose of training,

(b) no person under 18 years of age is employed to-

(i) give signals to the operator of lifting equipment driven by mechanical power, or

(ii) to operate any such equipment,

(c) every signal given for directing the movement of lifting equipment—

(i) is distinctive in character, and

(ii) such that the person to whom it is given is able to hear or see it easily, and

(d) signalling devices are—

(i) properly maintained, and

(ii) the means of communication are adequately protected from accidental interference.

#### **Examination and testing of lifting equipment.**

52. (1) An employer shall ensure that, without prejudice to Regulation 30,

(a) fixed work equipment for lifting loads, including rail mounted work equipment for lifting loads, is not taken into use for the first time unless—

(i) it has been tested and thoroughly examined by a competent person, and

(ii) a certificate of test and examination specifying the safe working load and, if appropriate, the maximum numbers of persons permitted has been obtained,

(b) mobile work equipment for lifting loads is not taken into use in any place of work for the first time unless—

(i) it has been examined and certified in accordance with this Regulation, or

(ii) it is a new machine and which—

(I) is CE marked in accordance with the relevant directives of the European Communities,

(II) is accompanied by an EC declaration of conformity in accordance with the relevant directives of the European Communities,

(III) is accompanied by a certificate of test and examination for that machine signed by the person making the test, specifying the safe working load, and

(IV) has not been reassembled since dispatch from the manufacturer,

(c) where

(i) any alteration or repair is carried out to lifting equipment or a lifting accessory, and

(ii) the alterations or repairs are relevant to the safe operation of the equipment,

the equipment is examined by a competent person in compliance with this Regulation before the equipment's return to service, and

(d) where a report of an examination pursuant to paragraph (3) specifies conditions for the safe working of the equipment, the equipment is used only in accordance with those conditions.

(2) In the case of work equipment to which paragraph (1)(b)(ii) applies, the period to the first examination pursuant to paragraph (3) shall be determined by reference to the date of the certificate referred to in paragraph (1)(b)(ii)(III).

(3) Without prejudice to Regulation 30, an employer shall ensure that work equipment of a type or class listed in column 1 of Parts B or C of Schedule 1 is not used unless it has been examined by a competent person at least once in the period specified in column 2 of Parts B or C of that Schedule or as required under the other circumstances described in Part C.

(4) Where equipment referred to in paragraph (3) has already been thoroughly examined in accordance with the relevant statutory provisions in force prior to the introduction of these Regulations, the beginning of the period referred to in paragraph (3) shall be deemed to be the date of the last such examination.

(5) The requirements of this Regulation do not apply to the work equipment listed under Part D of Schedule 1.

(6) Where a thorough examination has been carried out in compliance with the relevant statutory provisions in force immediately before the commencement of these Regulations, the examination shall be regarded as being in compliance with this Chapter and this Regulation does not apply until after the expiry of the period specified under those statutory provisions.

(7) An employer shall ensure that a thorough examination is carried out as soon as practicable if one is outstanding under the relevant statutory provisions from the period before the commencement of these Regulations.

#### **Reports by competent persons.**

53. (1) A competent person carrying out an examination under Regulation 52 shall—

(a) prepare a report of the result of every examination and test as referred to in Regulation 52 containing the particulars that are set out in Part E of Schedule 1,

(b) where work equipment is examined pursuant to Regulation 52 and the examination reveals that the equipment can only be used safely if certain repairs are carried out or if the person making the examination foresees a need for such repairs—

(i) inform in writing the owner and user of the need for such repairs or the potential need,

(ii) not later than 20 days after the completion of the examination, send a copy of the report of the examination to the Authority where immediate cessation of the work has been advised, and

(iii) in the case of potential need for repairs, specify the period within which, in his or her opinion, the repairs shall be carried out.

(2) A competent person carrying out an examination under Regulation 52(3) may specify a period less than that in column 2 of Parts B or C of Schedule 1 if in that person's opinion a more frequent examination is required but, if this is done, he or she shall provide the reason for the opinion in writing to the owner and user of the work equipment.

## Keeping of records and registers of lifting equipment.

54. (1) An employer shall ensure that a report produced under Regulation 53, or a copy of it

(a) is kept at the place of work when the lifting equipment is permanently located there,

(b) in the case of lifting equipment on a construction site, is kept at the site office or at the business address of the contractor for whom the report was made, and

(c) in the case of mobile equipment, is kept on the equipment in addition to being available for inspection at the address of the equipment owner.

(2) An employer shall ensure that—

(a) a register of lifting equipment and lifting accessories containing details of the equipment, distinguishing number, date of first use and date of last thorough examination and testing is maintained and kept available for inspection by an inspector, and

(b) if the equipment does not have a distinguishing number or mark, one of long lasting duration is provided.

# Safe working loads for excavators, loaders or combined excavators and loaders when used for object handling.

55. (1) In this Regulation, reference to "machine" is a reference to an "excavator, loader or combined excavator and loader when used for object handling".

(2) An employer shall ensure that—

(a) before a machine to which this Regulation applies, being a machine not equipped for object handling in accordance with the relevant Directive or harmonised standard, is first used for object handling, a competent person—

(i) specifies the safe working load or loads which may be raised and lowered by the machine, or where its safe working load depends on the configuration of the machine, its safe working load for the different configurations are determined, and (ii) provides a signed certificate specifying the safe working load and any necessary safety provisions,

(b) the certificate referred to in subparagraph (a)(ii) is kept available for inspection with the machine,

(c) a machine is not loaded beyond the relevant safe working load specified in the certificate required by subparagraph (a)(ii),

(d) the specified safe working load or loads and, where applicable, the outrigger or jack position and the length of jib or boom to which the safe working loads relate is either plainly marked on the machine or information relating safe working loads to the distance worked is displayed in a clearly visible position in the driver's cab,

(e) if, after the issue of the certificate required by subparagraph (a)(ii), a machine undergoes any substantial alteration or repair likely to affect the specified safe working loads, that certificate is cancelled and a new certificate is obtained,

(f) hydraulically-operated machines used in object handling operations with a maximum rated lift capacity as specified by the manufacturer, greater than or equal to 1,000 kg or an overturning moment greater than or equal to 40,000 Nm are fitted with:

(i) check valves on the cylinders used for lifting or another means, to prevent a gravity fall of the load in the event of a hydraulic failure, and

(ii) an acoustic or visual warning device which indicates to the operator when the rated lift capacity or corresponding load moment is reached,

(g) means of identification are plainly marked on machines to which this Regulation applies, and

(h) machines to which this Regulation applies are examined and tested periodically in accordance with Parts B and C of Schedule 1.

#### Specific requirements for scotch and guy derrick cranes.

56. An employer shall ensure that, where a scotch and guy derrick crane is to be used,

(a) the jib of a scotch derrick crane is not erected between the back stays of the crane,

(b) a load which lies in the angle between the back stays of a scotch derrick crane is not moved by that crane,

(c) appropriate measures are taken to prevent the foot of the king post of any scotch derrick crane from being lifted out of its socket or support whilst in use, and

(d) where the guys of a guy derrick crane cannot be fixed at approximately equal inclinations to the mast so that the angles between adjacent pairs of guys are approximately equal, such other measures are taken as will ensure the stability of the crane.

# Construction, testing, examination and safe working load of lifting accessories.

57. (1) An employer shall ensure that—

(a) subject to paragraph (2), a chain, rope or other lifting accessory is not used in raising or lowering or as a means of suspension unless—

(i) it is of good construction, sound material, adequate strength, suitable quality and free from patent defect,

(ii) it is properly installed and used,

(iii) it is properly maintained,

(iv) it is used only for the purpose for which it was intended,

(v) except in the case of a fibre rope or fibre rope sling, it has been tested and examined by a competent person and there has been obtained a certificate of such test and examination specifying the safe working load and signed by the person making, or responsible for, the carrying out of the test and examination,

(vi) in the case of a fibre rope or fibre rope sling, information from the manufacturer on its safe working load is available, and

(vii) it is marked in plain legible figures and letters with the safe working load and a means of identification, unless paragraph (2) applies to the safe working load,

(b) a chain, rope or lifting gear is not loaded beyond its safe working load except for testing purposes as specified by, and under the direction of, a competent person appointed to carry out the tests,

(c) a hook used for raising or lowering or as a means of suspension is either—

(i) provided with an efficient device to prevent the displacement of the sling or load from the hook, or

(ii) of such shape as to reduce as far as possible the risk of such displacement,

(d) a sling used for raising or lowering on a lifting appliance is securely attached to the appliance and the method of attachment is not a method likely to result in damage to any part of the sling or to any lifting gear supporting it,

(e) a double or multiple sling is not used for raising or lowering if-

(i) the upper ends of the sling legs are not connected by means of a shackle, ring or link of adequate strength, or

(ii) the safe working load of any sling leg is exceeded because of the angle between the sling legs,

(f) where a load is being lifted or otherwise moved, adequate steps are taken by the use of suitable packing, or otherwise, to prevent the edges of the load from coming into contact with a sling, rope or chain, where this would involve risk of personal injury,

(g) a load is not raised, lowered or suspended on a chain or wire rope which has a knot tied in any part of the chain or rope under direct tension,

(h) a chain which is shortened or joined to another chain by means of bolts and nuts inserted through the links is not used for raising, lowering or suspending any load, and

(i) where a chain or lifting gear is made of such material that would require annealing or a form of heat treatment to ensure its safety, the chain or lifting gear

(i) is effectively annealed or subjected to an appropriate form of heat treatment under the supervision of a competent person and at intervals as specified by a competent person, and

(ii) is not used in raising or lowering or as a means of suspension unless a report has been made in writing of every annealing or appropriate heat treatment signed by the competent person under whose supervision the annealing or heat treatment was carried out.

(2) Where the safe working load of a rope or rope sling is—

(a) contained in the report made pursuant to Regulation 53 and the rope or sling is so marked as to enable its safe working load as specified in that report to be ascertained from the report, or

(b) in the case of a fibre rope or a fibre rope sling, contained in a table of safe working loads clearly visible in a prominent position at the workplace the ropes or rope slings do not need to be marked with their safe working load.

#### Delivery of loads with lifting accessories attached.

58. Where—

(a) any article, material or other load intended for use in construction work is delivered at, or adjacent to, a construction site with a chain, rope or other lifting accessory attached thereto and designed for use as a means of raising and lowering that class of load when removing the same from the point of delivery to a position on the site, and

(b) the chain, rope or gear is free from patent defect whether of construction or quality and is not owned or hired by any contractor who is undertaking construction work on the site,

this Chapter does not apply in respect of the use of such chain, rope or lifting gear for raising or lowering the load so long as the chain, rope or gear remains attached to the article, material or load.

## Duty of persons who hire lifting equipment to others.

59. Without prejudice to section 16 of the Act, a person who hires out lifting equipment for use by others, shall comply with the duties set out in Regulations 52 and 54.

**Duty of the master of a ship in respect of examination of lifting equipment.** 60. The master of a ship shall comply with the duties set out in Regulations 52 and 54.

# Duty of the owner of a fishing vessel in respect of examination of lifting equipment.

61. The owner of a fishing vessel shall comply with the duties set out in Regulations 52 and 54.".

GIVEN under my hand

2010

Minister of State at the Department of Enterprise, Trade and Innovation

## **EXPLANATORY NOTE**

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

These Regulations amend the Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007) as previously amended by the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2007 (S.I. No. 732 of 2007) and the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2010 (S.I. No. 176 of 2010).

The Regulations also substitute new provisions for Chapter 2 of Part 2 relating to the Use of Work Equipment.

Chapter 2 of Part 2 of the Regulations, as amended, transposes Directive 2009/104/EC of the European Parliament and of the Council of 16 September 2009 concerning the minimum safety and health requirements for the use of work equipment by workers at work (codified version), by substituting new provisions for Regulations 27 to 61. Directive 2009/104/EC consolidates, without substantive amendment, the texts of Council Directive 89/655/EEC of 30 November 1989 concerning the minimum safety and health requirements for the use of work equipment by workers at work, as amended by Council Directive 95/63/EC of 5 December 1995. Accordingly, the amended Regulations are "technical" amendments that do not involve any substantive changes to the duties set out originally in S.I. No. 299 of 2007 as amended by S.I. No. 732 of 2007.

Chapter 2 of Part 2 and Schedule 1 to the Regulations set out requirements relating to the use of work equipment at work as regards various matters including employers' duties regarding the use of work equipment by their employees, information and instruction, inspection of work equipment, maintenance control devices, guards and protection devices, connection to energy sources, contact with wheels or tracks of mobile work equipment, drive systems of mobile work equipment, combustion engines of mobile work equipment, fork-lift trucks, safety of self-propelled work equipment, traffic rules for mobile work equipment, work equipment for lifting loads, cranes, work equipment for lifting goods or persons, hoists and lifts, lifting accessories, signalling and operation of lifting equipment, periodic examination and testing of lifting equipment, reports by competent persons, records and registers of lifting equipment, safe working loads for excavators, loaders or combined excavators and loaders when used for object handling, requirements for scotch and guy derrick cranes and construction, testing, examination and safe working load of lifting accessories.

In addition to transposing Directive 2009/104/EC, Chapter 2 of Part 2 of the Regulations also retains various other provisions of the 2007 Regulations relating to the use of work equipment. In that respect the only changes incorporated in these Regulations relate to Regulation 55 concerning safe working loads for excavators, loaders or combined excavators and loaders when used for object handling.