## COMMISSION OF THE EUROPEAN COMMUNITIES



Brussels, 27.06.1995 COM(95) 311 final

94/0077 (SYN)

## Amended proposal for a

### **COUNCIL DIRECTIVE**

amending Directive 89/655/EEC on the minimum safety and health requirements for the use of work equipment by workers at work

2nd Individual Directive within the meaning of Article 16 of Directive 89/391/EEC

(presented by the Commission pursuant to Article 189 a (2) of the EC-Treaty)



## EXPLANATORY MEMORANDUM

Following the opinion of the European Parliament delivered on 17 February 1995 (first reading), the Commission herewith presents to the Council an amended proposal for a Council Directive under Article 189 a, paragraph 2, of the EC Treaty.

The amended proposal mostly seeks to clarify, precise or correct the original proposal, whilst retaining the same general structure and objectives as the initial proposal.

Of the 50 amendments adopted by the European Parliament 26 have been accepted, 17 have been redrafted.

The amendments accepted by the Commission make the proposal more precise as regards the information of workers and the objectives of some prescriptions (Annex I, point 3.1.1., 3.2.1., 3.2.2., 3.2.5., 3.3.4., 3.4., Annex II, 1.4., 1.14., 2.5., 3.1.1. and Annex IV,2) or correct linguistical errors.

The Commission also accepted the introduction of the need to take into account ergonomic principles and the strengthening of the criteria for the inclusion of work equipment in the inspection schedule (Annex IV), once in a redrafted version.

Whereas the Commission agrees to change the deadline for the bringing into conformity of existing specific work equipment (as covered in Annex I, part 3) to all the relevant requirements of Annex I concerning them to the end of the year 2000, it cannot admit their mandatory scrapping five years later.

The Commission did not accept a series of amendments which are already covered elsewhere in the text sometimes in better terms. This is the case for "qualified personnel", testing before putting into use, committee arrangements, a new proposed recital, consultation procedures and training.

Although sharing the European Parliament's concern that the prevention measures should not be limited to workers only but also extend to persons in general, the Commission was unable to introduce such amendments since the scope of Article 118a of the Treaty would be exceeded.

Other amendments aiming at rendering the proposal more stringent in respect to kickback of workpieces, to cartridge operated fixing tools and to protection against rolling over of all agricultural vehicles would lead to excessive cost and therefore have been rejected, as were amendments on marking of lifting equipment and information of workers because of their potential to lead to confusion.

Finally an amendment on test records was due to a translation error in the original proposal. The text should be a copy of the second paragraph of point 2.13 of the Annex

of Directive 89/655/EEC which is simply transferred to Annex II and which deals with keeping maintenance logs up to date.

The Economic and Social Committee delivered its opinion on 23 November 1994.

Original Commission Modified proposal Proposal THE COUNCIL OF THE unchanged EUROPEAN COMMUNITIES, Having regard to the unchanged Treaty establishing the European Economic Community, and in particular Article 118a thereof, Having regard to the proposal from the unchanged Commission, In cooperation with the unchanged European Parliament, unchanged Having regard to the opinion of the Economic and Social Committee, Whereas Article 118a of unchanged the Treaty provides that the Council shall adopt, by means of directives, minimum requirements for encouraging improvements, especially in the working environment, to guarantee a better level of protection of the safety and health of workers; Whereas, pursuant to the said Article, such unchanged directives must avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized enterprises; Whereas compliance with the minimum requirements designed to guarantee a better standard of safety and health in the use of work equipment is essential to ensure the safety and health of workers; Whereas, therefore, the Member States must take unchanged measures to facilitate implementation of the provisions of this Directive by enterprises, in particular small and medium-sized enterprises; whereas such measures may include training and information activities and the introduction of standard inspection programmes adapted to the specific requirements of the various sectors of the economy;

Original Commission Modified proposal Proposal Whereas the provisions of unchanged this Article do not prevent each Member State from establishing and maintaining more stringent protective measures, compatible with this Treaty, governing conditions of work; Whereas Article 9 (1)[1] of Directive 89/655/EEC provides for the addition unchanged to the Annex of supplementary minimum requirements applicable to work equipment covered by point 3 of the Annex, in accordance with the procedure pursuant to Article 118A of the Treaty; whereas Directive 92/57/EEC [2] provides that certain parts of Annex IV B, Section II will be specified at the same time; Whereas, Directive unchanged 89/655/EEC should be supplemented by minimum requirements concerning inspections to be carried out on certain work equipment during use and laying down certain rules for use with a view to promoting the health and safety protection of workers; Whereas this Directive Whereas this Directive must confine itself to must confine itself to defining the objectives to defining the objectives to be achieved and the be achieved and the principles to be respected principles to be respected in such a way as to leave the Member States free to leaving Member States free to decide how national decide how this is to be 'legislation will be done: complied with and improved upon. Whereas this Directive constitutes a practical step towards creating the social dimension of the European Community; Article 1 unchanged Directive 89/655/EEC is unchanged amended as follows: 1. Article 4 is amended as unchanged

follows:

- in paragraph 1(a) (ii)
the words 'I, points 1

- in paragraph 1(a) (ii)
the words 'in the

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and 2' are inserted
after the word
'Annex',

- in paragraph 1(b) the following text is added: 'I, points 1 and 2 and by 31 December 2000 at the latest with the minimum requirements laid down in point 3 of Annex 1',

- paragraphs 3 and 4 as follows are added :
- '3. The employer shall take the measures necessary to ensure that, during use of the work equipment, the minimum requirements listed in Annex II are respected.
- 4. The Member States shall, after consultation with both management and labour, establish procedures for authorising alternative means of protection and/or organization of work as long as this guarantees an equivalent level of safety, where the specific conditions of use do not permit application of the minimum requirements set out in paragraph 3';
- 2. The following Article
  is inserted :
- 'Article 4b Inspection of work equipment
  - 1. The employer shall ensure that where the

Annex' are replaced by 'in Annex I',

- in paragraph 1(b) the words 'in the Annex' are replaced by 'in Annex I'.
- a paragraph 1(c) is inserted:

"c) Without prejudice to a)i) and in derogation from a)ii) and b), work equipment which is subject to the provisions of Annex I (3) and is already at the disposal of workers in the enterprise or establishment by 31 December 1996, shall meet the minimum requirements provided for in Annex I within four years of that date at the latest."

unchanged

unchanged

4. The Member States shall, after consultation with both sides of industry, establish procedures for authorising alternative means of protection and/or organization of work as long as application of the minimum requirements referred to in paragraph 3 is objectively not possible and an equivalent level of safety is guaranteed.

unchanged

unchanged

1. The employer shall ensure that where the

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safety of work equipment depends on the installation conditions, it shall be subject to an initial inspection (after installation and before first being taken into service) and after assembly at new site, to ensure that the work equipment has been installed correctly and is operating properly.

- 2. The employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations are subject to:
- periodic inspections and
- special inspections
  each time that
  exceptional
  circumstances which
  are liable to
  jeopardize the safety
  of the work equipment
  have occurred, such as
  modification work,
  accidents, heavy
  storms or prolonged
  periods of inactivity,

so that the deterioration can be detected and remedied in good time.

3. Pursuant to paragraph 2 and without prejudice to the provisions of Article 6(3) of Directive 89/391/EEC, the employer shall draw up or have drawn up a plan for the inspection of work equipment based on the intended conditions for use and taking account of any information furnished by the manufacturers.

This plan shall determine the type and frequency of the inspections and the

safety of work equipment depends on the installation conditions, it shall be subject to an initial inspection (after installation and before first being taken into service) and after assembly at a new site or in a new location, to ensure that the work equipment has been installed correctly and is operating properly.

- 2. The employer shall ensure that work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations is subject to:
- periodic inspections and testing where appropriate and
- special inspections
  each time that
  exceptional
  circumstances which
  are liable to
  jeopardize the safety
  of the work equipment
  have occurred, such as
  modification work,
  accidents, heavy
  storms or prolonged
  periods of inactivity,

to ensure that health and safety conditions are maintained and that the deterioration can be detected and remedied in good time.

unchanged

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methods used - and, if necessary, any circumstances making it necessary to perform special inspections - the specific competence required for inspection and the criteria to be applied on evaluation, and the conclusions to be drawn therefrom.	
The schedule shall also indicate the effective conditions of use under which it is valid.	unchanged
4. The inspection plan under paragraph 3 shall cover at least the work equipment listed in Annex IV(1). Inspections under paragraph 1 must be carried out at least in the cases covered by Annex IV(2).	unchanged
5. The Member States shall specify the criteria governing the competence required for drawing up the inspection plans under paragraph 3 and for carrying out the inspections under paragraphs 1 and 2 based on the minimum criteria given in Annex V.	unchanged
6. Member States shall take measures to facilitate the implementation by enterprises, in particular small and medium-sized	unchanged
enterprises, of the provisions laid down in the preceding paragraphs. These measures may include training and information activities targeted at enterprises and the introduction of standard inspection programmes adapted to the specific requirements of the various sectors of the economy.	
7. The results of inspections must be recorded and kept at the disposal of the authorities concerned. They must be kept for a suitable period of time.	unchanged
When work equipment is used outside of the	unchanged

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enterprise it must be accompanied by physical evidence that the last inspection has been carried out;

3. The following article is inserted: 'Article 5 A

Ergonomics and occupational health

The working posture and position of workers while performing their work tasks must be taken fully into account by the employer when applying minimum health and safety requirements and be improved in accordance with ergonomic principles.'

- 4. At the end of Article 6, paragraph 2 the following sentence is added:
  'All workers are to be informed of relevant changes in the working environment and of the potential dangers of all work equipment present in the work area or site, even if they do not use it directly.'
- 5. Article 7 is amended by inserting a third indent:
- '- all workers receive adequate training in the use of work equipment and are informed of the consequences which might arise from not respecting the rules on health and safety.'
- 6. Article 8 is amended as
  follows :

unchanged

7. Article 9 is amended as
follows :

unchanged

3. Article 8 is amended as follows:

the words 'the Annex' are replaced by 'the Annexes';

- 4. Article 9 is amended as follows:
  - in paragraph 1 'the Annex' (twice) is amended to 'Annex I',

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<pre>- in paragraph 2 the   words 'the Annex' are   replaced by 'the   Annexes';</pre>	unchanged except FR
5. The Annex becomes Annex I.	8. The Annex becomes Annex I.
2.6, 2.12, and 2.13 paragraph 2 are deleted.	unchanged
<pre>In 2.16 the words 'loading and unloading' are inserted after 'production'.</pre>	unchanged
At the end of the Annex the words 'as referred to in Article 9(1) of the Directive' are deleted.	unchanged except FR
The text under the Annex I of this Directive is added to Annex I;	unchanged
<ol> <li>Annexes II, III, IV and V to this Directive are added.</li> </ol>	9. Annexes II, III, IV and V to this Directive are added.
Article 2	unchanged
Final provisions	unchanged
1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1996 at the latest. They shall forthwith inform the Commission thereof.	unchanged
When Member States adopt these provisions they shall contain a reference to this Directive or shall be accompanied by such reference on official publication. The manner in which this reference is made shall be left to the Member States.	unchanged
2. Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or adopt in the field governed by this Directive.	unchanged
Article 3	
This Directive is	unchanged

Original Commission Modified proposal Proposal addressed to the Member States. [1] OJ No L393 of 30.12.1989, p.13 [2] OJ No L245, 26.8.1992, ANNEX I unchanged 3.1. Minimum requirements unchanged for woodworking and allied machinery and presses where the conditions of use require regular manual intervention in the danger zone. 3.1.1. Where such work 3.1.1. Woodworking equipment cannot, because machines and allied machinery which, because of their operating modes, cannot be equipped with protective devices that of its operating mode be equipped with protective devices to prevent access to danger zones entirely or to stop the movement of entirely prevent access to moving parts before access danger zones when operating, shall be equipped with protective is obtained to danger zones, the hazards to devices which reduce the risk of contact with the workers when operating in the danger zones must be reduced to a minimum. tools to a minimum. Presses, which are not equipped with effective protective devices or which for technical reasons cannot be fitted with such a device, shall be used only with closed tools or fixed guards which do not allow access to danger zones. 3.1.2. Work equipment used unchanged in conditions in which there is a risk of kickback or entrapment of the work piece must be equipped or adapted (with appropriate protective devices) in order to reduce this hazards and its effect. 3.1.3. Where an operator unchanged obliged to intervene manually on work equipment is placed at risk through

residual energy in that equipment, it must be so adapted that the hazard is

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eliminated. If necessary, it must be possible to dissipate the accumulated energy easily without it constituting a safety hazard to workers.

- 3.2. Minimum requirements for mobile work equipment, whether or not self-propelled
- 3.2.1. Work equipment with ride-on workers must be fitted out such as to ensure that the workers can remain in complete safety during the journey. Places for standing passengers must be such that workers can place both feet fully on a nonslip, if necessary slatted, surface and that at all times during the journey they have a sound hold, including when they are moving around on the work equipment. The risk of inadvertent contact of the ride-on workers with wheels or tracks or of workers being crushed by wheels or tracks must be kept to a minimum.
- 3.2.2. Where an inadvertent blockage of the drive unit of an item of mobile work equipment might create a specific risk, such equipment must be equipped or adapted to prevent blockages or to avoid any adverse effects on workers where such blockage cannot be avoided.
- 3.2.3. 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 must be available for fixing them.
- 3.2.4. Mobile work equipment with ride-on workers must be designed to restrict, under actual conditions of use, the risks arising from work equipment rollover:
  - either by a protective structure to ensure

unchanged

3.2.1. Work equipment with ride-on workers must be fitted out such as to ensure that the workers can remain in complete safety during the journey. Places for standing passengers must be such that workers can place both feet fully on a nonslip, if necessary slatted, surface and that at all times during the journey they have a sound hold, including when they are moving around on the work equipment. The risk of inadvertent contact of the ride-on workers in a way that they may be struck or crushed against another stationary or moving object must be kept to a minimum.

3.2.2. Where an inadvertent blockage of the drive unit of an item of mobile work equipment might create a specific risk, such equipment must be equipped or adapted to prevent blockages. Where such blockage cannot be avoided, every possible measure must be taken to avoid any adverse effects on workers.

unchanged

unchanged

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that the equipment does not tilt by more than a quarter turn,	
- or a structure giving sufficient clearance around the ride-on workers if the tilting movement continues beyond a quarter turn.	unchanged
These protective structures may be an integral part of the work equipment. Where there is a risk of a ride-on worker being crushed between a protection structure and the ground a restraining system for the ride-on workers must be installed. These protective structures are not required when the work equipment is - except for transfer to and from the site of work - stabilized during operation or where the design makes rollover impossible.	unchanged
Annex III gives a non- exhaustive list of conditions of use for some mobile work equipment requiring protection against the hazards caused by rollover.	unchanged
3.2.5. Self-propelled work equipment which may, in motion, engender risks for persons must fulfil the following conditions:	unchanged
<pre>(a) the equipment must   have facilities for   preventing   unauthorized start-   up;</pre>	unchanged .
(b) it must have appropriate facilities for minimizing the consequences of a collision where there is more than one item of track- mounted work equipment in motion at the same time;	unchanged
(c) there must be a device for braking and stopping work equipment. Where safety constraints so require, emergency facilities with readily accessible controls	unchanged

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must be available for braking and stopping the equipment in the event of failure of the main facility;	
(d) there must be auxiliary devices to improve visibility if the direct field of vision of the driver is inadequate;	<pre>(d) auxiliary devices    must be installed to    allow sufficient    visibility when the    direct field of    vision of the driver    is inadequate;</pre>
<pre>(e) work equipment   designed for use at   night or in dark   places must be   equipped with   lighting appropriate   to the work to be   carried out;</pre>	(e) work equipment designed for use at night or in dark places must be equipped with lighting appropriate to the work to be carried out and must ensure sufficient safety for workers.
<pre>(f) work equipment which    constitutes a fire    hazard, either on    its own or in    respect of whatever    it is towing and/or    carrying and which    is liable to    endanger workers,    must be equipped    with appropriate    fire-fighting    appliances where    such appliances are    not available    sufficiently nearby    at the place of use;</pre>	unchanged
<pre>(g) remote-controlled   work equipment must   stop automatically   once it leaves the   control range;</pre>	unchanged
(h) remote-controlled work equipment which may in normal conditions engender a crushing or impact hazard must have facilities to guard against this risk.	unchanged
3.3. Minimum requirements for work equipment for lifting loads	unchanged
3.3.1. When work equipment is installed permanently, the loads to be lifted and the stress induced at the mounting or fixing point must be taken into account to safeguard the equipment's strength and stability.	unchanged

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3.3.2. Work equipment must be clearly marked to indicate its maximum capacity.	unchanged
Lifting accessories must be marked such that it is possible to identify the characteristics essential for safe use. Work equipment which is not designed for lifting persons but which might be so used in error must be appropriately and clearly marked to this effect.	unchanged
3.3.3. Where loads handled by work equipment pass over or are close to travelled ways protective devices must be installed to ensure that:	unchanged
(a) workers are not struck by the load;	unchanged
(b) in the event of partial or total power supply failure or the termination of an operation, the load cannot drift dangerously or fall freely;	unchanged
(c) the load cannot be released unintentionally.	unchanged
3.3.4. Work equipment for lifting workers must be such as to:	3.3.4. Work equipment for lifting workers must be such as to:
<pre>(a) prevent the risk of     the lift cage     falling by suitable     devices;</pre>	<pre>(a) prevent the risk of     the carrier falling     by suitable devices;</pre>
<pre>(b) prevent the risk of     the user himself     falling from the     cage;</pre>	<pre>(b) prevent the risk of     the user himself     falling from the     carrier;</pre>
<pre>(c) prevent the risk of     the user being     crushed, trapped or     struck caused by the     absence of an     internal cabin door;</pre>	(c) prevent the risk of the user being crushed, trapped or struck caused by unintended contact with objects;
(d) ensure that persons trapped in the cage in the event of an incident are not exposed to danger and can be freed.	(d) ensure that persons trapped in the carrier in the event of an incident are not exposed to danger and can be freed.

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If for reasons inherent to the site and to height differences, the risks referred to in point (a) cannot be avoided by any safety measures, an enhanced safety coefficient suspension rope must be installed and checked every working day in accordance with the conditions set out in Article 4b.

3.4. Minimum requirements for scaffolding and similar work equipment to facilitate worker access to and presence at workstations at height.

This work equipment must be such as to prevent the risk of falls and/or falling objects. To this end:

- (a) the work equipment must be able to withstand foreseeable loads during the use, particularly those resulting from materials and tools that have to be placed on the work equipment and/or used to carry out the work;
- (b) any excessive flexion and excessive oscillation or torsion movement must be precluded where equipment is being used according to instructions;
- (c) the work equipment must neither slip nor overturn nor shift nor collapse when in position for use;
- (d) erection, dismantling and any modifications required of nonpermanent work equipment must be able to be carried out in safety;
- (e) work equipment must

If for reasons inherent to the site and to height differences, the risks referred to in point (a) cannot be avoided by any safety measures, an enhanced safety coefficient suspension rope must be installed and checked every working day in accordance with the conditions set out in Article 4b.

3.4. Minimum requirements for scaffolding and similar work equipment, including ladders, to facilitate worker access to and presence at workstations at height.

unchanged

unchanged

unchanged

unchanged

unchanged

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incorporate integral safety devices or ones which are readily attachable to the structure;	
(f) the work equipment must afford sufficient room for the work to be carried out and for the requisite materials and tools to be set down.	unchanged
	(g) an adequate amount     of securely fixed     decking and ladders     must be installed so     as to provide a     minimum level of     safety for workers     when working,     gaining access to     and leaving     workstations at     height.
3.5. Minimum requirements for work equipment used for detecting non-apparent risks	unchanged
Such work equipment must be such as to avoid, bearing in mind the conditions of use, any risks arising from the faulty display or interpretation of the measuring signal. Where appropriate, it must be possible to verify the operational condition of the work equipment at any time.	unchanged
3.6. Minimum requirements for bolt firing tools, captive bolt guns, nail drivers and the like	unchanged
It must not be possible to fire bolt firing tools, captive bolt guns, nail drivers and similar work equipment easily or without the application of a certain degree of force. Where it is not possible to meet this condition, the device should be rearmed for each shot.	unchanged
ANNEX II	unchanged
Minimum requirements concerning the use of work equipment referred to in Article 4 (3)	unchanged

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O. Preliminary remark	unchanged
The obligations laid down in this Annex apply having regard to the provisions of the Directive and where the corresponding risk exists for the work equipment in question.	unchanged
<ol> <li>Minimum requirements of a general nature for all work equipment</li> </ol>	unchanged
1.1. Work equipment and its components must, if necessary for the health and safety of workers, be stabilized by anchoring or other means.	unchanged
1.2. Work equipment must be installed and located such that there is sufficient space between moving parts and fixed or moving parts in their environment and such that all forms of energy and substances used or produced can be supplied and/or removed in a safe manner.	unchanged
1.3. Work equipment must be erected or dismantled under safe conditions, observing any instructions which may have been furnished by the manufacturer.	unchanged
1.4. Work equipment installed or erected in the open must be protected against lightning strike by lightning conductor equipment or other suitable means.	1.4. Work equipment in need of protection against the effects of lightning while being used must be protected by a system for conducting the resultant electrical charges to earth or by other suitable means.
1.5. In respect of the installation and use of electrically operated work equipment, care must be taken that the electrical components, including connecting leads, are protected against harmful external influences. Conductors must be properly insulated. All electrical work equipment and systems must be earthed or protected by other suitable means of precluding any risk of accident due to direct or	unchanged

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indirect contact.	
<pre>1.6. Where work equipment is installed, erected or used below or in the</pre>	unchanged
vicinity of overhead electrical power lines, appropriate measures must be taken to avoid any contact of workers and/or	
their work equipment with the lines or electrification of workers.	
1.7. Work equipment which is taken out for service must be fitted with guards and protective and safety devices as prescribed. Otherwise, the equipment must be dismantled or rendered inaccessible or unusable by removing and taking away essential operating parts.	unchanged
1.8. Work equipment may not be used for operations or in conditions for which it is inappropriate.	unchanged
Whenever necessary from the point of view of health and safety of workers, work equipment must be used with safety devices and accessories prescribed for the various type of use.	unchanged
1.9. Before modifying work equipment or its conditions for use to an extent exceeding that envisaged by the manufacturer, the measures set out in Article 6 of Directive 89/391/EEC must be taken.	unchanged
1.10. If work equipment has to be combined, its mutual compatibility must be assured and use must be limited as indicated by the manufacturers and/or having regard to any supplementary restrictions.	unchanged
1.11. No work may be carried out on electrical equipment or installations unless precautions have been taken to safeguard the safety of every worker involved or liable to be involved in the work.	unchanged
1.12. Dead work shall not begin on electrical	unchanged except DE

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installations until, where necessary to prevent electrical danger, the following measures have been taken:	
<ul> <li>the electrical installation or equipment to be worked on has been positively identified, and</li> </ul>	unchanged
- the electrical installation or equipment has been disconnected from all sources of electrical energy, and	unchanged
<ul> <li>measures to prevent reconnection to any source of electrical energy have been taken, and</li> </ul>	unchanged
- the absence of voltage on the electrical installation or equipment has been verified by the use of suitable means, and	unchanged
- the electrical installation or equipment has been earthed and short- circuited where necessary by suitable means; and	unchanged
- measures have been provided or measures taken to prevent persons approaching and/or contacting any live parts which present an electrical danger in the vicinity of the work activity.	unchanged
1.13. Live work shall not begin on an electrical installation without ensuring that:	unchanged
<ul> <li>it is unreasonable for the electrical installation to be dead, and</li> </ul>	unchanged
<ul> <li>it is reasonable for the work to be carried out on the electrical installation while it is live, and</li> </ul>	unchanged
- suitable precautions, including where necessary the provision of suitable electrical safety equipment, are taken	unchanged

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to prevent injury.

- 1.14. If one or more workers have to have access to parts of work equipment where there is a risk arising from oxygen deficiency, temperature, gas dusts, liquids, vapours or other substances, an emergency intervention and rescue procedure must be drawn up. Access for workers must be rendered safe, by means of prior ventilation or emptying or by some other suitable means; a check must be carried out to ensure that the required result has been obtained. Protection measures must be maintained during the intervention period. At least one person with whom there is reliable communication must remain present outside the work equipment during the intervention to ensure that the worker or workers can be rescued if necessary. The necessary rescue equipment must be available in situ.
- 1.15. Where work equipment contains flowing or aspirated materials, workers must, by appropriate means, be kept at a sufficient distance to ensure that they are not buried or sucked in.
- 1.16. Mobile or portable work equipment equipped with tools or accessories which cannot be entirely protected may be used only if no worker other than the operator is in danger zone of these tools or accessories.
- 1.17. Mechanically operated work equipment, including all moving parts which are potential hazards, must be shut down for the purposes of repairing breakdowns, unblocking jammed moving parts and carrying out adjustment, servicing, cleaning or maintenance work.

1.14. If one or more workers have to have access to parts of work equipment where there is a risk arising from unintended harmful contact with objects, oxygen deficiency, temperature, gas dusts, liquids, vapours or other substances, an emergency intervention and rescue procedure must be drawn up. Access for workers
must be rendered safe, by
means of prior ventilation or emptying or by some other suitable means; a check must be carried out to ensure that the required result has been obtained. Protection measures must be maintained during the intervention period. At least one person with whom there is reliable communication must remain present outside the work equipment during the intervention to ensure that the worker or workers can be rescued if necessary. The necessary rescue equipment must be available in situ.

unchanged

unchanged

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Where there is no alternative to carrying out work on moving parts, other measures must be taken to ensure that work can be conducted in safety, also when attempts are being made to resume operations.	unchanged
1.18. Workers must be equipped with suitable tools for removing in safety foreign objects or pieces of material from the vicinity of moving parts, otherwise these parts must be shut down.	unchanged
1.19. Work equipment inspection records must be kept up to date.	1.19. If any machine has a maintenance log it must be kept up to date.
1.20. In respect of changes being made to a programme of reprogrammable control systems, steps must be taken to ensure that safety functions are preserved, adjusted or supplemented. Any changes must be documented.	unchanged
2. Minimum specific requirements for the use of mobile equipment, whether or not self- propelled	unchanged
2.1. Self-propelled work equipment shall only be driven by workers who have been specially trained in the safe driving of such equipment. Workers undergoing driving training must be under constant supervision.	unchanged
2.2. If several pieces of equipment are moving around in the same area, traffic rules must be drawn up and respected.	unchanged
2.3. Organizational measures must be taken to prevent workers on foot coming within the vicinity of self-propelled work equipment operating in restricted areas.	unchanged except DE
If work can be done properly only if workers on foot are present, appropriate measures must be taken to prevent them from being run over.	If work can be done properly only if workers on foot are present, appropriate measures must be taken to prevent them from being harmed by the equipment.

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2.4. The transport of workers on mechanically driven mobile work equipment is authorized only where safe facilities are provided to this effect. If work must be carried out during the journey, speeds must be adjusted as necessary.	unchanged
2.5. Mobile work equipment with a combustion engine may not be used in enclosed spaces or galleries unless sufficient quantities of clean air can be guaranteed.	2.5. Mobile work equipment with a combustion engine may not be used in working areas unless sufficient quantities of clean air can be guaranteed.
	The engine will be switched off when not in immediate use.
2.6. Remote-controlled work equipment must be operated such that it is at all times within the operator's field of vision or field of control.	unchanged
2.7. Mobile work equipment may not be loaded such that workers are placed at risk during transport. In particular, free masses of loaded material may not set up dynamic forces liable to compromise the stability of the equipment.	unchanged
2.8. When energy transmission units between mobile work equipment have been disconnected they must be fixed so as not to drag on the ground.	unchanged
2.9. In connection with the use of mobile work equipment which, by design, projects objects or materials, appropriate measures must be taken to ensure that no worker is in the projection zone.	unchanged
<ol> <li>Minimum requirements for the use of work equipment for lifting loads</li> </ol>	unchanged
3.1. Minimum requirements for the use of work equipment for lifting guided or non-guided loads	unchanged
3.1.1. Mobile or movable	3.1.1. Mobile or movable

Original Commission Proposal	Modified proposal
work equipment designed for lifting loads may be used only on a base which is sufficiently resistant to ensure the stability of the work equipment during use.	work equipment designed for lifting loads may be used only on a base which is sufficiently resistant to ensure the stability of the work equipment during use under all foreseeable conditions.
3.1.2. Persons may be lifted only by means of work equipment and accessories provided for this purpose. Exceptionally, and judging each case on its merits, the competent authorities may authorize work equipment which is not specifically designed for the purpose of lifting persons to be used to this effect, provided that specially designed accessories are used.	unchanged
When persons are being lifted the control position must be manned at all times. Persons being lifted must have reliable means of communication. In the event of danger, there must be reliable means of evacuating them.	unchanged
3.1.3. Workers may not be present under suspended loads. Loads may not be moved above unprotected workplaces occupied by workers.	unchanged except FR
However, if work cannot be carried out properly any other way, appropriate procedures must be laid down and applied.	unchanged
3.1.4. Lifting accessories must be selected as a function of the loads to be handled, gripping points, attachment tackle, atmospheric conditions and the mode and configuration of slinging. Lifting accessory tackle must be clearly marked so that users are aware of its characteristics where such tackle is not dismantled after use.	unchanged
3.1.5. Lifting accessories must be stored away from harmful atmospheric conditions and rodents.	unchanged

unchanged

3.2. Minimum requirements for the use of work

Original Commission Proposal	Modified proposal
equipment for lifting non- guided loads	
3.2.1. When two or more items of work equipment used for lifting non-guided loads are installed or erected on a site such as their working radii overlap, appropriate measures must be taken to avoid collision between the loads and/or the work equipment parts themselves.	unchanged
3.2.2. When using mobile work equipment for lifting non-guided loads, measures must be taken to prevent the equipment from tilting, overturning or, if necessary, moving or slipping. Checks are to be made to ensure that these measures are executed properly.	unchanged
3.2.3. If the operator of work equipment designed for lifting non-guided loads cannot observe the full path of the load either directly or by the way of auxiliary equipment providing the necessary information, a competent person must be in communication with the operator to guide him and organizational measures must be taken to prevent collisions of the load which could endanger workers.	unchanged
3.2.4. While a worker is attaching or detaching a load by hand, operation of the work equipment must be under his authority.	unchanged
3.2.5. If a load has to be lifted by two or more items of work equipment for lifting non-guided loads simultaneously, a procedure must be established and applied to avoid any risk resulting from poor coordination on the part of the operators. These operations may only be carried out in the presence of a responsible person other than the operators of the work equipment concerned.	unchanged
3.2.6. If work equipment designed for lifting non-guided loads cannot	unchanged

Original Commission Proposal	Modified proposal
maintain its hold on the load in the event of a complete or partial power failure, appropriate measures must be taken to avoid exposing workers to any resultant risks.	
Suspended loads must not be left without surveillance unless arrangements have been made to prevent access to the danger zone.	unchanged
3.2.7. Work equipment designed for lifting non-guided loads, including the gripping devices, accessories and support structure, must be kept under surveillance during work so as to detect any defects. Should any such defects jeopardizing the safety of operation be detected, work must be stopped immediately and necessary steps taken to ensure that the equipment no longer constitutes a hazard.	unchanged
3.2.8. Use in the open of work equipment must be halted when the meteorological conditions deteriorate to the point of jeopardizing the safe use of the equipment and exposing workers to risks. Additional protection measures to avoid work equipment turnover must be taken to avoid any risks to workers.	unchanged
4. Specific minimum requirements for the use of other specific work equipment.	unchanged
4.1. Work equipment designed to contain and distribute liquids, vapours or gases under pressure or liquified must be used such as to avoid exceeding permissible service temperatures and pressures and, where appropriate, the levels of the liquid phase. Any attachments must be protected against the risk of mechanical, chemical or biological damage.	unchanged
4.2. Pressure vessels subject to high temperature heat exchange and/or exposed to flames	unchanged

Original Commission Proposal	Modified proposal
must be used under constant surveillance unless they are self-regulated or incorporate fail-safe facilities.	
4.3. When filling pressurized systems, operators must have appropriate means for overseeing and respecting the filling conditions.	unchanged
4.4. Pressurized systems which previously contained flammable, corrosive or toxic substances must be depressurized and vented before being taken out of service permanently, without causing any risk to workers.	unchanged
4.5. The relevant characteristics of materials on which it is intended to use a bolt firing tool or similar work equipment must be identified prior to use. If firing is liable to jeopardize other workers, additional precautions must be taken.	unchanged
Annex III	
Non-exhaustive list - covered in Annex I, 3.2.4, last paragraph - of the conditions of use for which certain mobile work equipment must be protected against the hazards caused by rollover	
left column	
Work equipment with a power rating of over 15 kW	unchanged
Trawler loaders or wheel loaders	unchanged
Back hoe loaders	unchanged
Trawler tractors or wheel tractors	unchanged
Scrapers (self-loading or not)	unchanged
Graders	unchanged
Articulated steer dumpers	unchanged
Self-propelled industrial trucks	unchanged except DE

Original Commission Proposal	Modified proposal
Agricultural, forestry and viticultural tractors  right column	unchanged
Conditions of use	unchanged
Working involving movement in the vicinity of height differences of more than 1 m, including trenches and ditches of a width exceeding 0,50 m and slopes steeper than 25 %	unchanged
All conditions	unchanged
All conditions	unchanged
ANNEX IV	
Non-exhaustive list of work equipment to be included in the inspection schedule referred to in article 4b (4)	unchanged
1.	
(a) Hyperbaric and hypobaric chambers, including their accessories, which are used as an enclosure for workers.	unchanged
(b) Mobile work equipment with a maximum speed of over 15 km/h.	(b) Mobile work equipment with a maximum speed of over 10 km/h.
(c) Work equipment, and its accessories, for lifting loads of more than 300 Kg and/or for lifting workers where there is a risk of falling from a height of more than 3 m.	(c) Work equipment, and its accessories, for lifting loads of more than 200 Kg and/or for lifting workers where there is a risk of falling from a vertical height of more than 3 m.
<pre>(d) Cable haulage installations designed to be erected at various sites.</pre>	unchanged
<pre>(e) Installations for storing and filling flammable liquids.</pre>	unchanged
(f) Pressurized work	unchanged

Original Commission Proposal	Modified proposal
equipment in one of the categories subject pursuant to Directive//EC to certification procedures requiring intervention by third parties or comparable organizations.	
<pre>(g) Safety components     and non-material     barriers.</pre>	(g) Safety components including non-material barriers.
	(h) Food-processing equipment that includes cutting mechanisms which are open and accessible during normal operation.
	(i) Silo mechanisms controlling the flow of materials and products and access to the silo.
2. Correct installation and stability of lifting gear which can be dismantled, work equipment for facilitating access to and the presence of persons at workstations at a height and hyperbaric and hypobaric chambers within the meaning of point 1 (a) must be examined each time they have been erected on a new site and before they are taken into service. Hyperbaric and hypobaric chambers must also undergo inspection for leakage.	2. Correct installation and stability of lifting gear which can be dismantled, work equipment for facilitating access to and the presence of persons at workstations at a height and hyperbaric and hypobaric chambers within the meaning of point 1 (a) must be examined each time they have been erected on a new site or location and before they are taken into service. Hyperbaric and hypobaric chambers must also undergo inspection for leakage.
ANNEX V	
Minimum competence criteria within the meaning of Article 4b (5)	unchanged
<ol> <li>Competent persons must be either natural or legal persons, whether belonging to the enterprise or not.</li> </ol>	unchanged
The competent person must have in his possession the full range of knowledge and experience necessary to handle all the aspects concerning the safety of a	unchanged

Origina Proposa	l Commission	Modified proposal
a work Depend and co equipm expert	of work equipment or equipment system. ing on the nature mplexity of the work ent concerned, the ise of more than one might be necessary.	
may be differ inspecting person whenev expert	me competent person involved at ent stages of the ention procedure, an endent competent must be called in er the requisite ise is not available athe enterprise	unchanged
draw u inspect equipm overal enabli influe condit safety work	person competent to up plans for the stion of work sent must have an l understanding and him to assess the ence of different ions of use on the condition of the equipment under teration. To this end it:	unchanged
(a)	possess the necessary professional qualifications based on theoretical and practical knowledge and experience commensurate with the type of equipment where appropriate, including the operation of systems of work equipment;	unchanged
(p)	have knowledge of the applicable laws;	unchanged
(c)	have knowledge of the various forms of inspection so that he can give precise indications as to their application and the interpretation of the results including any requisite measures;	unchanged
(d)	be sufficiently independent of other interests, particularly those of the person responsible for equipment operation.	unchanged
	e person competent to out the inspections	unchanged

Origin Propos	al Commission al	Modified proposal
must	:	·
(a)	have the necessary professional qualifications based on theoretical and practical knowledge and experience commensurate with the equipment under consideration;	unchanged
(p)	have appropriate knowledge of the applicable laws;	unchanged
(c)	have knowledge and sufficient practical experience of the inspections to be carried out, and of evaluation of the results;	unchanged
(d)	<pre>be able to draw up test certificates and/or reports;</pre>	unchanged
(e)	be sufficiently independent of other interests particularly those of the person responsible for equipment operation as regards the conduct and evaluation of the inspection.	unchanged



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