

# COMMISSION OF THE EUROPEAN COMMUNITIES

REVISED VERSION

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Brussels, 6 February 1989

Proposal for a  
COUNCIL DIRECTIVE

on the approximation of the laws of the Member States  
on mobile machinery

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(presented by the Commission)

EXPLANATORY MEMORANDUM

I. General

1. Subject

This proposal for a Directive on mobile machinery has been prepared in application of the Council resolution of 7 May 1985<sup>1</sup> on a new approach to technical harmonization and standards, and forms part of the work programme envisaged in the White Paper which should lead to the completion of the internal market by the end of 1992.

It follows on from an earlier Commission proposal COM(87)564 final<sup>2</sup> for a Council Directive on the approximation of the laws of the Member States relating to machinery, which was amended by a proposal COM(88)267 final-SYN 107<sup>3</sup> presented by the Commission pursuant to the third paragraph of Article 149 of the EEC Treaty, incorporating woodworking machines and envisaging a stricter certification procedure for certain types of machines with greater risk potential.

Because of their specificity mobile machines are not covered by the proposal for a Directive mentioned above. In reality the mobility of these machines introduces risks which are not covered or whose specificity requires a different formulation. In order therefore, not to overburden the the proposal mentioned above and to maintain the required coherence the Commission has decided to make this proposal.

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<sup>1</sup> OJ No C 136, 4.6.1985, p 1

<sup>2</sup> OJ No C 29, 3.2.1988. p 1

<sup>3</sup> OJ No C 214, 6.8.1988 p 23

The mobile machinery sector covered by this proposal includes not only individual machines but also more complex assemblies; these may be self-propelled, towed, pushed or carried by other mobile machinery or tractors. Machinery specially designed to equip mobile machinery is also covered.

Thus the scope covered is very broad and of significant economic importance to the Community, covering, but not limited to, mobile machinery used in agriculture and forestry (except tractors already covered by other specific directives), construction and mining.

The aim of the Directive is to harmonize national provisions concerning safety of new mobile machinery during manufacture. It therefore has a dual aim: firstly the introduction of Community legislation on the prevention of industrial accidents and secondly the elimination of barriers to trade arising out of the disparity of such provisions. In pursuit of the first of these objectives this proposal, which relates to mobile machinery manufacture and design, will be supplemented by another Directive to be prepared by the Commission which, in a more general way, will cover the use of mobile machinery at the workplace from the point of view of workers' health and safety.

The first of these Directives lays down the conditions to be observed by manufacturers for machinery to be considered safe and, consequently, to be placed on the market and put into service; the second, on the other hand, will cover users, on the understanding that it will not require, at national level, modifications to mobile machinery which has satisfied the requirements of the first Directive.

The very comprehensive essential health and safety requirements are drafted in such a way as to offer a high level of protection.

2. Economic and social impact

The value of all EEC engineering production in 1984 was about 180 000 million ECU. According to recent estimates this figure has now exceeded the 200 000 million ECU mark. It is estimated that 10 000 million ECU of this falls within the scope of the Directive.

Before starting to prepare its proposal the Commission conducted an in-depth survey to examine the national regulations affecting this sector. The survey results confirmed that there are considerable differences between the Member States, not only as regards technical specifications relating to machinery design, but also in the administrative procedures for examinations, testing, inspections and marketing and operating authorizations.

The extent of these differences and their impact on trade within the Community have always been evident from the large number of complaints that the Commission has had to deal with and which now emerge quite clearly from the implementation of the procedures for the provision of information in the field of technical regulations and standards laid down by Directive 83/189/EEC.<sup>4</sup> Since the entry into force of these procedures in 1984, many national draft technical regulations on mobile machinery safety have been notified by Member States. In certain cases the Commission decided to deliver detailed opinions owing to the incompatibility of these drafts with Community law.

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<sup>4</sup> OJ No L 109, 26.4.1983, p.8.

Obviously it is no simple matter to assess the economic impact of these barriers and to evaluate their cost. This difficulty is further aggravated by the very diversity of the sector. In the construction plant field the majority of production is accounted for by a number of large firms, including multinational subsidiaries. The production of mining equipment is also highly specialized. On the other hand the agricultural and forestry equipment sector (excluding tractors) contains a large number of small and medium-sized businesses, where barriers to trade very often force them to concentrate on their national or local markets. An economic analysis can evaluate the additional costs to exporting firms due to "non-harmonization", but cannot readily assess the negative value due to a lack of expansion or opportunities not taken.

However, the development of the internal market cannot be considered only in terms of overall growth but should also be seen in the context of the improvement of living standards in the Community. The economic and social aspects are therefore closely linked and must be tackled with a combined approach.

There are no centralised Community statistics on the number of accidents caused by the use of mobile machinery; the few figures available at national level nevertheless show that the number is high, especially in agriculture.

The application of the principles adopted when drafting the Directive and in particular the essential requirements, namely the examination of the causes of hazards and the incorporation of safety features in mobile machinery at the design and construction stages, will make a significant contribution to reducing the number of accidents and all the associated human and economic consequences.

3. Consultation of the parties concerned

From the start of the preparatory work, the Commission endeavoured to involve all the parties concerned, namely representatives of governments, trade unions, industrial federations - particularly the Committee for European Construction Equipment (CECE) and the European Committee of Associations of Manufacturers of Agricultural Machinery (CEMA), inspection agencies and the European standards bodies CEN and CENELEC. The Commission also consulted the Safety and Health Commission for the Mining and other Extractive industries which considered that machinery used in these industries should come within the scope of this proposal. The ad-hoc working party on machinery of the Advisory Committee on Safety, Hygiene and Health Protection at Work studied the proposal and adopted a favourable opinion on it. Furthermore, a delegation of that working party took part in the work of the group of experts. The Advisory Committee is being consulted at present and an opinion is expected soon.

The Commission will ensure that all the parties concerned, including labour organizations, are involved in the standardization and management work provided for in this Directive.

More particularly it is at present studying the proposal by the European Trade Union Confederation relating to the contribution of the social partners in evaluating the impact of the application of directives and the standardisation work on the level of workers' safety.

4. The transitional period

In order to fulfil their intended role of unifying the markets, it must be possible to accompany the Directives based on the new approach with standards corresponding to the essential health and safety requirements of the Directives. The Council resolution of 7 May 1985 provided that, as a temporary measure and while awaiting the availability of European standards, the presumption of conformity of products to the Directive could be proved by conformity to national standards, whose correspondence to the essential health and safety requirements of the Directive will have been verified by a Community inspection procedure.

However, in the field in question, given the broad scope of the Directive, it will probably take a relatively long time for all the necessary European standards to become available; moreover, it may well not always be possible to bridge the gap with national standards.

Thus it must be anticipated that, during the transitional period, manufacturers will have to certify the conformity of their mobile machinery directly with the essential health and safety requirements of the Directive without the availability of standards to enable a uniform interpretation of these requirements.

There is therefore a danger that, until appropriate standards are available, differing interpretations of the essential health and safety requirements will lead to frequent recourse to the provisions of the safeguard clause and thus to a considerable loss of the effectiveness of the Directive.

This should obviously help to generate a strong desire for rapid progress in European standardization and a clear commitment of industry to that end.

It is in fact in industry's interest for the standardization bodies to make a recognised method for proof of conformity available to it as soon as possible.

Until such time as this objective is fully achieved, the Commission must ensure, by effective management of the procedures provided for by the safeguard clause, that recourse to that clause does not become too frequent. This could be brought about by arranging effective cooperation between the Commission, Member States' inspection authorities and all the parties concerned. The examination of specific examples of recourse should help to develop common attitudes to the problem of assessing technical options in relation to the essential health and safety requirements of the Directive and hence devise action to prevent a proliferation of subsequent recourse to the safeguard clause.

This type of cooperation between the Commission and the inspection authorities of the Member States already exists, has proved itself in the context of the management of several Directives and should be applicable, using informal and pragmatic procedures, without compromising the exclusive competence conferred by the Treaty on the Commission as guardian of Community law.

##### 5. The role of standardization

The role of standardization is to codify in a free and non-binding manner the state of the art as regards the means to be deployed to satisfy the obligations laid down by the essential health and safety requirements. Since, under the new approach, Member States will have to presume that products manufactured in accordance with European standards comply with the essential health and safety requirements, in the event of a dispute these standards can constitute an extremely important limitation of liability for any manufacturer.



At the same time European standardization helps to achieve the objective of industrial rationalization, improve the quality of mobile machinery, improve the safety of users of mobile machinery and offer the manufacturer a degree of legal security.

The Commission already has the necessary instruments to promote the role of standardization, namely the financial resources provided for in the Community budget to finance the activities of CEN and CENELEC, and the standardization remits from the Commission to these bodies as provided for in Directive 83/189/EEC, with consultation of the Standing Committee provided for in Article 5 thereof.

Without underestimating the importance of these instruments which have already proven their effectiveness on the practical and political levels, it is clear that the success of standardization, and hence of the Directive itself, will depend to a large extent on the level of industry's commitment to standardization work.

In the first half of 1987 CEN, encouraged by the Commission, took the initiative of setting up a planning committee for the machinery sector, composed of representatives of the standards bodies and the industry.

This committee has a threefold task:

- to draw up an inventory of existing international and national standards;
- to identify standardization needs in relation to the essential health and safety requirements;
- to establish priorities and a standardization programme.

On the basis of this programme the Commission, after consulting the Standing Committee set up by Directive 83/189/EEC, will give standardization remits to CEN/CENELEC in accordance with the procedure provided for in Article 6 of that Directive.

## II. The proposal for a Directive

### 1. Field of application

The field of application of this proposal for a Directive covers a very broad area from individual mobile machines of very simple design to more complex installations used in the construction field or various types of site work.

The field of application is defined not by an exhaustive list but by a definition that is general enough not to become obsolete with normal technological development or the appearance of new mobile machinery on the market.

Apart from certain express exclusions, the proposal for a Directive sets a limit to allow for other Directives containing either essential health and safety requirements or technical requirements relating to mobile machinery construction and design.

### 2. Conformity certification

The proposal for a Directive on mobile machinery provides for a conformity certification system for the placing on the market and putting into service of products based on the liability of the manufacturer or his agent, who must in all cases make a declaration of conformity and affix the EC mark to the machinery.

In certain exceptional cases prior third-party certification will be required for mobile machinery or parts thereof in the absence of harmonized standards or where mobile machinery does not conform fully to one of the standards which cover all the applicable essential health and safety requirements. These exceptional cases are set out in Annex IV to the proposal for a Directive.

The obligation to make a declaration of conformity and affix the EC mark obviously does not rule out the possibility, which is always open to the manufacturer or his agent, of obtaining conformity marks or certificates through a third party, in order to limit his liability in the event of a dispute. However, the Directive does not impose mutual recognition of such proof of conformity on Member States; such proof will have to remain a private law matter between manufacturers and the bodies issuing such marks or certificates. The Commission considers that this solution is consistent with the principle that a single Directive should not provide for different legal systems of conformity certification which are not of equivalent value.

It should also be stressed that the planned conformity certification system based on the manufacturer's declaration is generally applicable to all products covered by the Directive, regardless of whether the manufacturer has applied the standards.

This solution seems to be necessary for the following reasons:

- in general, barring exceptional cases in some countries and for certain types of mobile machinery, current national systems make no provision for prior certification by third parties;
- if a compulsory system of certification by third parties had nevertheless to be provided for all mobile machinery not conforming to the standards, this would mean in practice that all mobile machinery would have to undergo laboratory tests before being placed on the market until such time as all the standards were available (and perhaps afterwards since it has not yet been demonstrated that standards will be necessary for all the essential health and safety requirements laid down by the Directive; certain essential health and safety requirements are already sufficiently explicit and a standard for these would only place unnecessary restrictions on mobile machinery design);

The system provided for by the Directive, however, represents a substantial departure from the present system in almost all Member States.

While at national level there are few examples of systems of prior certification by third parties, it should also be borne in mind that industrial safety inspection authorities have very considerable powers of appraisal and action, notably as regards the putting into of service of equipment.

However, such powers cannot under any circumstances nullify the scope of the Directive based on the system of manufacturer's liability, as regards the requirements for the design and manufacture of mobile machinery laid down by the Directive and set out in detail by the standards.

It should be repeated that the change in relation to national systems planned by this proposal for a Directive is justified and compensated at Community level by the forthcoming entry into force of the Directive concerning liability for defective products.

### 3. The essential health and safety requirements

The essential safety requirements satisfy a number of criteria which had to be taken into consideration at the drafting stage. Their aim is to create Community legislation based on a philosophy of inherent safety.

The first principle that they embody is inherent safety and health in mobile machinery design and construction. Indeed, mobile machinery will always be significantly safer if all the hazards it can involve have been examined at the design stage so as to eliminate them or limit their consequences; additional prevention measures, especially safety devices added on to mobile machinery, will often be less effective and more expensive than the elimination of accident hazards at source.

The second principle adopted was to cover all the specific hazards that mobile machinery could present, so that all situations endangering the safety or health of users, whether operators or people in the vicinity of mobile machinery, would be anticipated and dealt with. Clearly no mobile machinery will have to satisfy all the essential health and safety requirements of the Directive at once, only those relevant to the hazards actually present.

The third principle, which is certainly where the most difficulties lie, was to draft requirements that could be applied to all mobile machinery (small and large, simple and complex), based on the idea that the essential health and safety requirements should be applicable in the absence of standards but without relaxing health and safety standards in relation to the situation in all the Member States as a whole. The solution adopted is to describe the essential health and safety requirements in the form of specifications but without including the means of achieving them.

In order to achieve the required specifications the manufacturer is therefore free to interpret them in his own way so as to satisfy the essential health and safety requirements. The application of harmonized standards will enable him to use one or more solutions devised by common consensus (regulatory bodies, manufacturers and users) thus representing the state of the art. He will of course have the option of not following the standards but in this case he will have to show that he has achieved a degree of safety that is at least equivalent.

**PROPOSAL FOR A COUNCIL DIRECTIVE**  
**on the approximation of the laws of the Member States**  
**on mobile machinery**

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and  
in particular Article 100a thereof,

Having regard to the proposal from the Commission,

In cooperation with the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

- (1) Whereas Member States have the responsibility of ensuring the health and safety on their territory of the public and, where appropriate, of domestic animals and goods and, in particular, of workers notably in relation to the hazards arising out of the use of mobile machinery;
- (2) Whereas, in the Member States, the legislative systems regarding accident prevention are very different; whereas the relevant compulsory provisions, frequently supplemented by de facto mandatory technical specifications and/or voluntary standards, do not necessary lead to different levels of health and safety, but nevertheless, owing to their disparities, constitute barriers to trade within the Community; whereas, furthermore, conformity certification and national certification systems for machinery differ considerably;

- (3) Whereas existing national health and safety provisions providing protection against the hazards caused by mobile machinery must be approximated to ensure free movement of mobile machinery without lowering existing justified levels of protection in the Member States; whereas the provisions of this Directive concerning the design and construction of mobile machinery, which are essential for a safer working environment, are not incompatible either with specific provisions, based on Article 118a of the Treaty, regarding the use of machinery and organization of safety of workers in the working environment;
- (4) Whereas the mobility of these machines introduces hazards which are not covered by the essential requirements of Council Directive .../.../EEC of ..... on the approximation of the laws of the Member States relating to machinery<sup>1</sup>; and whereas the risks covered by the aforementioned Directive require that the essential requirements should be formulated in a different manner;
- (5) Whereas the mobile machinery sector is an important part of the engineering industry and is one of the industrial mainstays of the Community economy;
- (6) Whereas paragraphs 65 and 66 of the White Paper on the completion of the internal market, approved by the European Council in June 1985, provide for a new approach to the approximation of laws;
- (7) Whereas the social cost of the large number of accidents caused directly by the use of mobile machinery can be reduced by inherently safe design and construction of mobile machinery and by proper installation and maintenance;
- (8) Whereas the field of application of the Directive must be based on a general definition of the term "mobile machinery" so as to allow the technical development of products; whereas this Directive should apply to mobile machinery used in mines;

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<sup>1</sup> OJ No L

- (9) Whereas Community Law, in its present form, provides - notwithstanding one of the fundamental rules of the Community, namely the free movement of goods - that obstacles to movement within the Community, resulting from disparities in national legislation relating to the marketing of products, must be accepted in so far as such requirements can be recognized as being necessary to satisfy imperative requirements; whereas, therefore, the harmonization of laws in this case must be limited only to those requirements necessary to satisfy the imperative requirements and essential health and safety requirements relating to mobile machinery; whereas these requirements must replace the relevant national requirements because they are essential;
- (10) Whereas the essential health and safety requirements must be satisfied in order to ensure that mobile machinery is safe; whereas these requirements must be applied with discernment to take account of the state of the art at the time of construction, and technical and economic requirements;
- (11) Whereas the use of mobile machinery within the meaning of this Directive can relate only to the use of the mobile machinery itself as intended by the manufacturer; whereas this does not preclude the laying down of conditions of use external to the mobile machinery, provided that it is not therefore modified in a way not specified in this Directive; whereas consumers may use machines coming within the scope of this Directive;
- (12) Whereas for trade fairs, exhibitions, etc. it must be possible to exhibit demonstration mobile machinery which, for the needs of the demonstration, does not conform to the Directive; whereas, however, the persons concerned should be properly informed of such non-conformity and that such mobile machinery cannot be purchased in that condition;



- (13) Whereas therefore this Directive defines only the essential health and safety requirements of general application; whereas in order to help manufacturers to prove conformity to these essential requirements it is desirable to have standards harmonized at European level for the prevention of hazards arising out of the design and construction of machinery and in order to allow checks of conformity to the essential requirements; whereas these standards harmonized at European level are drawn up by private-law bodies and must retain their non-binding status; whereas for this purpose the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) are the bodies recognized as competent to adopt harmonized standards in accordance with the general guidelines for cooperation between the Commission and these two bodies signed in 13 November 1984; whereas within the meaning of this Directive a harmonized standard is a technical specification (European standard or harmonization document) adopted by either or both of these bodies, on the basis of a remit from the Commission in accordance with the provisions of Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations<sup>(2)</sup>, as amended by Directive 88/182/EEC<sup>3</sup>, and on the basis of the general guidelines referred to above;
- (14) Whereas, while awaiting the adoption of harmonized standards within the meaning of this Directive, conformity to the essential requirements and the free movement of mobile machinery should be facilitated by the acceptance, at Community level, of products conforming to the national standards adopted, on a temporary basis, with the aid of a Community checking procedure to ensure that national standards satisfy the essential requirements of this Directive; whereas to this end, in view of the general and horizontal role which the committee set up by Article 5 of Directive 83/189/EEC has in Community standardization policy, and more

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<sup>2</sup> OJ No L 109, 26.4.1983, p. 8.

<sup>3</sup> OJ No L 81, 26.3.1988, p. 75.

particularly its role in the preparation of standardization remits and the operation of the standstill procedure in European and national standardization, that committee is most appropriate to assist the Commission in carrying out Community checks of the conformity of national standards; whereas both sides of industry, particularly labour organizations, must be properly consulted concerning the standardization and management work relating to this Directive.

- (15) Whereas, in line with current general practice in Member States, manufacturers should retain responsibility for certifying the conformity of their mobile machinery to the relevant essential requirements; whereas conformity to harmonized standards creates a presumption of conformity to the relevant essential requirements; whereas it is left to the sole discretion of the manufacturer, where he feels the need, to have his products examined and certified by a third party;
- (16) Whereas a stricter certification procedure is desirable for certain types of mobile machinery or components thereof that have a greater risk potential; whereas it is, however, sufficient to make EC type-examination mandatory only where the harmonized standards concerned are not, or only partly, complied with; whereas this EC type-examination procedure may be followed by an EC declaration by the manufacturer without a stricter system such as quality assurance, EC verification or EC monitoring being necessary;
- (17) Whereas it is essential that the manufacturer or his authorized representative established in the Community prepare a technical construction dossier before drawing up the EC declaration of conformity; whereas, however, it is not essential for all the documentation to exist permanently in a material manner but it must be possible to make it available on demand; whereas it need not include detailed plans of the sub-assemblies used for the manufacturer of mobile machinery, unless a knowledge of them is essential for verification of conformity with the basic health and safety requirements;

- (18) Whereas the mere fact of not being able to present the technical construction dossier following a reasoned request by a Member State may be taken as a presumption of the non-conformity of mobile machinery;
- (19) Whereas it is necessary not only to ensure free movement and the putting into service and use of mobile machinery or accessories for such machinery bearing the EC mark and having an EC conformity certificate; whereas it is also necessary to ensure free movement of mobile machinery not bearing the EC mark where it is to be incorporated into other mobile machinery or assembled with other mobile machinery to form a complex installation; whereas nevertheless such mobile machinery cannot be put into service or use until it has been certified for conformity since, in the absence of the EC mark, it must be regarded as not ready for use;
- (20) Whereas the Member States' responsibility for safety, health and the other aspects covered by the essential requirements on their territory must be recognized in a safeguard clause providing for adequate Community protection procedures;
- (21) Whereas the addressees of any decision taken under this Directive must be informed of the reasons for such a decision and the means of appeal open to them;
- (22) Whereas the measures aimed at the gradual establishment of the internal market must be adopted by 31 December 1992; whereas the internal market consists of an area without internal frontiers within which the free movement of goods, persons, services and capital is guaranteed;

HAS ADOPTED THIS DIRECTIVE :

CHAPTER I

Scope, placing on the market and freedom of movement

Article 1

1. This Directive applies to mobile machinery and lays down essential health and safety requirements for such machinery.
2. For the purposes of this Directive, "mobile machinery" means an appliance, plant, machine or equipment which operates in working areas and whose operation requires either mobility while working, or continuous or semi-continuous movement between a succession of fixed working positions. Mobile machinery may be self-propelled, towed, pushed or carried by other mobile machinery or tractors.
  - Working areas may be in particular building sites, civil engineering works, dredging works, thoroughfares, mines, quarries, sports grounds, fields, meadows, woodland, forests, green spaces, mushroom beds, glasshouses, farm buildings, stretches of water, etc.;
  - Mobile machinery may work in particular as graders, dumpers, harrows, ploughs, sowing and spreading machines, crop treatment machines, harvesting machines, trailers, etc.;
  - Mobile machinery which works with a continuous or semi-continuous movement between a succession of fixed working positions includes in particular hydraulic shovels, drills, refuse trucks, certain harvesting machines, pile drivers, etc.;

3. Complete interchangeable accessories or equipment intended to perform a given task and generally fitted to mobile machinery by the user himself, whether or not made by the same manufacturer, should be regarded as independent mobile machinery.
4. This Directive applies to agricultural and forestry tractors not covered by the specific Directives in force.
5. The following are excluded from the scope of this Directive:
  - mobile machinery whose principal function is lifting,
  - mobile machinery whose only power source is directly applied manual effort,
  - means of transport, namely vehicles intended solely for transporting passengers or goods by road, rail, on water or by air, and which are not directly involved in a given type of work,
  - mobile machinery with a medical usage,
  - all mobile machinery corresponding to the above definition and covered by an EEC Directive containing essential health and safety requirements or technical design and construction requirements relating to health and safety in respect of the hazards covered by such a Directive.
6. Where a machine is covered by the Low Voltage Directive, that Directive shall apply if the hazards of electrical origin are greater than the hazards covered by this Directive.

## Article 2

1. Member States shall take all appropriate measures to ensure that mobile machinery may be placed on the market and put into service and use only if it does not endanger the health or safety of persons, domestic animals or property, when properly installed and maintained, and used for its intended purpose.

2. The provisions of the Directive shall not affect Member States' entitlement to lay down, with due observance of the Treaty, such requirements as they may deem necessary to ensure that workers are protected when using the mobile machinery in question, provided that this does not mean that the mobile machinery is modified in a way not specified in the Directive.
3. Inspections carried out by Member States in the exercise of their obligations under paragraph 1 shall be limited to the provisions of this Directive.
4. At trade fairs, etc. Member States shall not prevent the showing of demonstration mobile machinery which, for the needs of the demonstration, does not comply with the provisions of this Directive, provided that an appropriate sign clearly indicates that such mobile machinery does not comply and that it is not for sale until it has been brought into compliance by the manufacturer or his agent established in the Community.

### Article 3

Mobile machinery shall satisfy the essential safety requirements set out in Annex I.

### Article 4

1. Member States shall not prohibit, restrict or impede the placing on the market, putting into service or use on their territory of mobile machinery which complies with the provisions of this Directive, bears the EC mark and is accompanied by the EC declaration of conformity.

2. Member States shall not prohibit, restrict or impede the placing on the market of mobile machinery, even where no EC mark is affixed, which is intended to be incorporated into mobile machinery or assembled with other mobile machinery to constitute mobile machinery. Member States shall not, however, permit the putting into service or use of such mobile machinery unless the mobile machinery has been declared to be in conformity with the provisions of the Directive and the EC mark has been affixed.

This paragraph shall not apply in the case of interchangeable equipment which is generally incorporated into or fitted to basic mobile machinery by the user.

#### Article 5

1. Member States shall presume conformity with the essential health and safety requirements referred to in Article 3 in respect of mobile machinery bearing the EC mark and accompanied by an EC declaration of conformity.
2. Where a national standard transposing a harmonized standard, the reference of which has been published in the Official Journal of the European Communities, covers one or more of the essential health and safety requirements, mobile machinery constructed in accordance with this standard shall be presumed to comply with the relevant essential requirements.

Member States shall publish the references of national standards transposing harmonized standards.

3. In the absence of harmonized standards, the national standards referred to in paragraph 4 shall create the same presumption of conformity.

4. Member States shall communicate to the Commission the texts of their national standards which they consider to conform to one or more essential safety requirements. The Commission shall notify such texts forthwith to the other Member States. In accordance with the procedure provided for in Article 6(2), it shall notify the Member States of those national standards in respect of which there is presumption of conformity with the essential requirements.

Member States shall publish the reference numbers of those standards. The Commission shall also publish these references in the Official Journal of the European Communities.

#### Article 6

1. Where a Member State or the Commission considers that the harmonized standards referred to in Article 5(2) do not entirely satisfy the relevant essential requirements referred to in Article 3, the Commission or the Member State concerned shall bring the matter before the Standing Committee set up under Directive 83/189/EEC, hereinafter referred to as "the Committee", giving the reasons therefor. The Committee shall deliver an opinion without delay.

Upon receipt of the Committee's opinion, the Commission shall inform the Member States whether or not it is necessary to withdraw those standards from the publications referred to in Article 5(2).

2. After receipt of the communication referred to in Article 5(4) the Commission shall consult the Committee. Within one month of receiving the latter's opinion, the Commission shall inform the Member States whether or not the national standard in question shall enjoy presumption of conformity and, if so, whether the references thereof must be published nationally.



If the Commission or a Member State considers that a national standard no longer satisfies the necessary conditions for presumption of conformity with the essential safety requirements referred to in Article 3, the Commission shall consult the Committee. Upon receipt of the latter's opinion, the Commission shall inform the Member States whether or not the standard in question shall continue to enjoy presumption of conformity and, if not, whether it must be withdrawn from the publications referred to in Article 5(4).

#### Article 7

1. Where a Member State ascertains that mobile machinery bearing the EC mark and used in accordance with its intended purpose is liable to endanger the safety of persons, domestic animals or property, it shall take all appropriate measures to withdraw such mobile machinery from the market, prohibit its placing on the market, putting into service or use, or restrict its free movement.

The Member State shall immediately inform the Commission of any such measure, indicating the reasons for its decision and, in particular, whether non-conformity is due to:

- (a) failure to satisfy the essential requirements set out in Annex I.
- (b) incorrect application of the standards referred to in Article 5,
- (c) shortcomings in the standards referred to in Article 5 themselves.

2. The Commission shall consult the parties concerned without delay. Where the Commission considers, after such consultation, that the action is justified it shall immediately so inform the Member State which took the initiative and the other Member States. Where the decision referred to in paragraph 1 is based on a shortcoming in the standards, and where the Member State taking the decision maintains its position, the Commission shall immediately inform the Committee and initiate the procedures referred to in Article 6.

3. Where mobile machinery which does not comply bears the EC mark, the competent Member State shall take appropriate action against whomsoever has affixed the mark and shall so inform the Commission and the other Member States thereof.

## CHAPTER II

### Certification procedure

#### Article 8

1. In order to certify the conformity of mobile machinery with the terms of this Directive, the manufacturer or his authorized representative established in the Community shall issue an EC conformity declaration as set out in Annex II for each mobile machine manufactured, and affix to it the EC mark referred to in Article 10.
2. Before placing on the market, the manufacturer, or his authorized representative established in the Community:
  - (a) if the mobile machinery is not covered by Annex IV or if it is covered but is manufactured in accordance with the standards referred to in Article 5, shall make up a dossier as provided for in Annex V;
  - (b) if the mobile machinery is covered by Annex IV but is manufactured without satisfying all or part of the standards referred to in Article 5, shall submit a model of mobile machinery for EC type examination as referred to in Annex VI.

3. Where paragraph 2(a) applies, the EC declaration of conformity must certify conformity only to the essential requirements of the Directive, and the EC mark must conform to the model set out in Annex III.

Where paragraph 2(b) applies, the EC declaration of conformity must certify conformity to the model which has undergone an EC type examination, and the EC mark must conform to the model set out in Annex III.

4. Where neither the manufacturer nor his agent established in the Community has complied with his obligations under paragraphs 1, 2 and 3, these obligations shall fall to any person placing the mobile machinery on the market in the Community. The same obligations shall apply to anyone assembling mobile machinery or parts thereof of various origins or constructing mobile machinery for his own use.

#### Article 9

1. Each Member State shall notify the Commission and the other Member States of the bodies it has designated to carry out the certification procedures referred to in Article 8(2)(b). The Commission shall publish, for information, a list of these bodies in the Official Journal of the European Communities and keep that list up to date.
2. Member States must apply the criteria set out in Annex VII for the assessment of the bodies to be notified. Bodies which satisfy the assessment criteria laid down in the relevant harmonized standards shall be presumed to comply with the said criteria.
3. A Member State which has designated a body must withdraw its notification if it finds that the body no longer satisfies the criteria set out in Annex VII. It shall immediately inform the Commission and the other Member States thereof.

CHAPTER III

EC Mark

Article 10

1. The EC mark shall consist of the symbol "CE" in conformity with the model given in Annex III followed by the last two digits of the year in which the mark was affixed.
2. The EC mark shall be affixed to mobile machinery in accordance with point 1.6.3 of Annex I.
3. The affixing to mobile machinery of marks or inscriptions which, owing to their design or position, are liable to be confused with the EC mark shall be prohibited.

CHAPTER IV

Final provisions

Article 11

Any decision taken pursuant to this Directive shall state the exact grounds on which it is based. Such a decision shall be notified as soon as possible to the party concerned, who shall at the same time be informed of the legal remedies available to him under the laws in force in the Member State in question and of the time limits to which such remedies are subject.

Article 12

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary in order to comply with this Directive before 1 January 1991. They shall forthwith inform the Commission thereof.

They shall apply these provisions from 1 January 1993.

2. Member States shall communicate the texts of the provisions of national law which they adopt in the field covered by this Directive to the Commission.

Article 13

This Directive is addressed to the Member States.

Done at,

For the Council

ANNEX I

Essential health and safety requirements

PRELIMINARY OBSERVATIONS

The preliminary observations of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery apply.

1.1 General

1.1.1 Definitions

The definitions of paragraph 1.1.1 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery apply with the following additions:

4. "working area" shall mean any area near mobile machinery in which the machinery and/or its tools move in order to carry out the work;
5. "driver" shall mean an operator authorized to supervise the movement of mobile machinery; he may also carry out other tasks as appropriate, either from his driving position or from another working position; in certain cases mobile machinery may be controlled by two operators.

Notes :

1. The driver may

- be carried by the mobile machinery itself - called a "ride-on driver",

- move in the immediate vicinity of the mobile machinery - called "pedestrian control",
- or stay in a fixed or movable position, with remote control of the mobile machinery.

2. Mobile machinery must always be moved by a driver, but may have other working positions than the one occupied by the driver when he is driving the mobile machinery; mobile machinery may also be controlled by several operators working together.

#### 1.1.2 Principles of inherently safe design

Paragraph 1.1.2 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.1.3 Materials and products

Paragraph 1.1.3 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.1.4 Lighting

Paragraph 1.1.4 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the following changes:

The first paragraph is replaced by the following:

If the manufacturer envisages use at night or in dark places, mobile machinery must be fitted with lighting appropriate to the work to be carried out, allowing adequate vision of the working area, without prejudice to any requirements of the highway code or other applicable regulations (such as navigation lights).

The third paragraph is replaced by the following:

If certain internal parts require frequent inspection they must be provided with appropriate lighting or devices for connection of additional lighting. The same applies to adjustment and maintenance areas. This requirement does not apply to mobile machinery intended solely for underground working.

#### 1.1.5 Design of mobile machinery for handling purposes

Paragraph 1.1.5 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, except for the first indent of the first paragraph, which is replaced by the following:

- be capable of being installed and removed safely, for example: stability must be ensured; there must be no dangerous movement when mobile machinery is handled in accordance with the manufacturer's instructions, etc.

### 1.2 Controls

#### 1.2.1 Driving position

The driving position must be so designed and constructed that all manoeuvres necessary for the operation of the mobile machinery can be performed by the driver from the driving position without risk or excessive fatigue.

If the dimensions of mobile machinery and/or its conditions of use allow, ride-on drivers must be housed in a driver's cab.

Such cabs must :

- comprise a seat, unless the driver has to work in a standing position,



- and must be designed and constructed to protect the driver against bad weather and extreme climatic conditions,
- and allow rapid evacuation.

The materials used for the cab and its fittings must be fire-resistant.

Depending on the work to be carried out and the climatic conditions or the place of use, the cab must be designed, constructed and/or equipped to ensure that the driver enjoys good working conditions (e.g. ventilation, heating, visibility, noise reduction, protection against falling objects and rollover protection).

Visibility from the driving position must be such that the driver can operate the mobile machinery and its tools in the intended conditions of use in complete safety for himself and the exposed persons. Where necessary, optical aids must be provided to remedy inadequate direct vision.

There may be two or more driving positions to facilitate forward and reverse manoeuvres of the mobile machinery; in this case each driving position must be provided with all the necessary controls. Where the various driving positions are not in direct line of sight of one another, mobile machinery must be so designed and constructed that the use of one of them precludes the use of the others.

Mobile machinery must be so designed and constructed that there can be no accidental contact with the wheels or tracks from the driving position. The driving position must so be designed and constructed as to avoid any health risk due to exhaust gases and/or a lack of oxygen.

### 1.2.2 Seating

The driving seat of any mobile machinery must keep the driver in a stable position, be comfortable and easily adapted to drivers of different weights and heights.

Where mobile machinery is fitted with a rollover protection structure, the seat must be equipped with a safety belt or equivalent device which does not restrict movement due to the suspension or required when driving.

The seat mountings must withstand all stresses to which they can be subjected, notably in the event of rollover.

Where there is no floor beneath the seat, the driver must have footrests covered with a non-slip material.

If operators other than the driver are occasionally or regularly carried by mobile machinery, appropriate places, preferably equipped with seats, must be provided to transport them without risk. Seats, where provided, must comply with the characteristics set out above.

### 1.2.3 Safety and reliability of controls

Paragraph 1.2.1 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.2.4 Control devices

Paragraph 1.2.2 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the following amendments.

Add the following as an introduction:

The driver must be able to operate all the controls as required to operate the mobile machinery from the driving position, except for functions which can be safely activated using controls located away from the driving position. This relates in particular to working positions other than the driving position or for which the driver has to leave the driving position in order to carry out the manoeuvre in complete safety.

Add the following at the end of the sixth indent:

- Where there are pedals they must be of an appropriate shape, size and spacing, they must have a non-slip surface and be easy to clean.
- Brake, accelerator and clutch pedals, and reversing pedals where fitted, must be designed, constructed and arranged so that they can be operated without risk of confusion.
- The functions of the various pedals must be clearly indicated in the instruction manual and in a legible and indestructible position visible at all times to the driver in his normal driving position.
- The accelerator and brake controls for the movement of mobile machinery running on rails for use in underground mines must be manual. The dead-man's control may be foot operated, however.
- In the case of wheeled mobile machinery, the steering system must be designed to reduce the force of sudden movements of the steering wheel or steering lever, caused by the reaction of the steered wheels.

The following is added at the end of the paragraph:

Where their operation can lead to hazards, notably dangerous movements, the controls of mobile machinery, except those having several predetermined positions, must return to the neutral position as soon as they are released by the operator.

Where self-propelled machinery has working positions other than the main driving position, it must be possible to lock the controls located in these positions from the main driving position.

Any control that locks the differential must be so designed and arranged that it allows the differential to be unlocked when the machinery is moving.

The controls of powered roof supports must be designed and laid out so that during displacement operations the operators are sheltered by a support in place. The controls should be protected against all unexpected activation.

### 1.2.3 Starting

It must be possible to start mobile machinery, restart it after a stoppage for whatever reason, or make a significant change in the speed only by voluntary action of a control provided for the purpose, except in the case of the normal operation of an automatic device.

Movements of mobile machinery with a ride-on driver must be possible only if the driver is at his driving position and is sure that he can control the mobile machinery

Movements of pedestrian-controlled mobile machinery must be possible only while there is sustained action on the relevant control by the driver; where no such device is provided, an emergency stop device must be fitted.

All mobile machines must have a means of preventing unauthorized starting.

The starter must function only if appropriate measures have been taken (e.g. clutch disengaged, gearbox in neutral, etc.) to ensure that no unintended movement of the mobile machinery or its tools can result.

It must be possible to start internal combustion engines without the help of dangerous auxiliary facilities.

#### 1.2.6 Stopping devices

Paragraph 1.2.4 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, preceded by the following:

##### Normal stopping

Without prejudice to the requirements of road traffic regulations, self-propelled mobile machinery and trailers must meet the requirements for slowing down, stopping, braking and immobilization so as to ensure safety under all conditions of service, loading, speed, ground conditions and gradient envisaged by the manufacturer and corresponding to situations usually encountered.

The driver must be able to slow down and stop self-propelled mobile machinery by means of a main device. In case of failure of the main brake, a fully independent and easily accessible emergency brake must be provided for slowing down and stopping.

A purely mechanical parking device must be provided to keep stationary equipment immobile; this parking brake must be latching and may be combined with one of the devices referred to in the preceding paragraph.

Mobile machinery which is remote controlled (by cables, radio, etc.) must be designed and constructed to stop automatically if the driver loses control.

Self-propelled machinery running on rails, for use in underground mines must be equipped with a dead-man control acting on the circuit controlling the movement of the machinery.

### 1.2.7 Reversing

In the case of pedestrian-controlled mobile machinery it must be possible to engage the reversing control only if this is not hazardous; the reversing speed must be such that it does not endanger the driver.

In the case of pedestrian-controlled agricultural and forestry machinery with a rear-mounted rotary tool, it must be possible to engage the reversing control only after disengaging the tools. If, however, the machine is propelled by the tool, the reversing speed must be such that it does not endanger the driver.

Where the accompanying driver's usual standing position is in the path of the mobile machinery when it is in reverse, the machine must be so designed and constructed as to avoid any risk of crushing if the driver falls (for example by use of a control requiring sustained action).

### 1.2.8 Mode selection

Paragraph 1.2.5 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.2.9 Power supply failure

Paragraph 1.2.6 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.2.10 Control circuit failure

Paragraph 1.2.7 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies with the following addition:

- Failure of power-assisted steering, where fitted, must not prevent mobile machinery from being steered during the time required to park it in a place which is not dangerous.

## 1.3 Protection against mechanical hazards

### 1.3.1 Stability

Mobile machinery, components and fittings thereof must be so designed and constructed that they are sufficiently stable, under the intended operating conditions, in use, storage or parking, without risk of overturning, falling or unforeseeable movement.

Powered roof supports must be so designed and constructed as to maintain an adequate orientation when moving and not to slip before they come under load. They must be equipped with anchorages for the top plates of the individual hydraulic props themselves.

### 1.3.2 Uncontrolled movements

When a part of a mobile machine has been stopped, any drift away from the stopping position, for whatever reason other than action on the controls, must be such that it is not a hazard to exposed persons.

Mobile machinery must be so designed and constructed as to reduce the amplitude of movement of its centre of gravity and to eliminate hazards due to such movement.

### 1.3.3 Risk of break-up during operation

Paragraph 1.3.2 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, the fourth paragraph being amended as follows:

Parts of mobile machinery rotating at high speed which, despite the measures taken, may break up or disintegrate, must be mounted and guarded in such a way that breakage their fragments will be contained or, failing this, cannot be projected towards the driving and/or operating positions.

### 1.3.4 Rollover

Where the use of self-propelled mobile machinery with a ride-on driver and possibly ride-on operators involves a risk of rollover, it must be designed and constructed, where its dimensions allow, to receive a rollover protective structure (ROPS). Such structures must conform to the specific directives in force.

For mobile agricultural and forestry machinery the rollover protective structure may be one of those required for wheeled agricultural and forestry tractors as described in the specific directives in force.

### 1.3.5 Falling objects

Precautions must be taken to prevent objects or materials coming from the mobile machinery itself or created by its work falling or being ejected in a manner hazardous to exposed persons.



Furthermore, where there is a risk during operation to the driver and any operators from falling objects or materials, self-propelled mobile machinery must be so designed and constructed, where its dimensions allow, to receive a falling-object protective structure (FOPS). Such structures must conform to the specific directives in force.

#### 1.3.6 Falls and access to the working or service positions

The manufacturer must provide safe access to and from all working, adjustment and maintenance positions; special attention must be paid to the driving position.

Parts of mobile machinery where people are likely to need access, to move or to stay must be designed and constructed in such a way as to avoid falls (for example by fitting hand rails, gates, etc.), must have non-slip surfaces, steps, footboards and rungs which are easily cleaned and allow water and mud to run off. The support surface must be sufficiently large and must have side stops where necessary.

Powered roof supports must allow for unhindered movement of the personnel.

Handholds must be provided; it must not be possible for controls to be used as supports or handholds.

#### 1.3.7 Hazards due to surfaces, edges or angles

Paragraph 1.3.4 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.3.8 Combined mobile machinery

Paragraph 1.3.4(a) of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.3.9 Variations in tool rotation speeds

Paragraph 1.3.4(b) of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

### 1.3.10 Towing devices

All mobile machinery used for towing or intended to be towed must be fitted with towing or coupling devices designed, constructed and arranged to ensure an easy and safe connection. In particular, mobile machinery fitted with a towbar must be equipped with a device to prevent the towbar disconnecting and to support it or, if appropriate, a device allowing automatic recovery of the towbar by the towing vehicle.

In the case of mobile agricultural or forestry machinery the towbar support must have a bearing surface designed, on the basis of the mass applied, to rest on soft ground.

### 1.3.11 Transmission of power between self-propelled mobile machinery (or tractors) and towed mobile machinery

Transmission shafts with universal joints linking self-propelled mobile machinery (or tractors) to towed mobile machinery must be guarded on the self-propelled machinery side and the towed machinery side over the whole length of the shaft and associated universal joints.

On the side of the self-propelled mobile machinery or tractor, the power take-off to which the transmission shaft is attached must be guarded either by a casing fixed to the self-propelled machinery (or tractor) or by any other device offering equivalent protection.

On the towed machinery side, the input shaft must be enclosed in a protective casing fixed to the mobile machinery.

Except in special cases (such as very short shafts) torque limitators or flywheels may be fitted to universal joint transmissions only on the side adjoining the driven machine.

All towed mobile machinery whose operation requires a transmission shaft to connect it to self-propelled mobile machinery or a tractor, must have a system for attaching the transmission shaft such that when the machinery is uncoupled, the transmission shaft and its guard are not damaged by contact with the ground or a part of the machinery.

The outside parts of the guard must be so designed, constructed and arranged that they cannot turn with the transmission shaft, so as to avoid any damage by winding or tearing through contact with another part. The guard must cover the transmission shaft to the ends of the inner jaws in the case of simple universal joints and at least to the centre of the outer joint or joints in the case of "wide-angle" universal joints.

It must not be possible for universal joint transmission shaft guards as described in the preceding paragraph to be used as steps.

#### 1.3.12 Safety of moving parts

Paragraph 1.3.5 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the following paragraphs:

### 1.3.12.1 Moving transmission parts

The moving parts of mobile machinery used to transmit power or movement must be designed, constructed, laid out or at least provided with guards or protective devices in such a way as to prevent all risk of contact which could lead to accidents, notably due to impact, severing, crushing, relative movement, speed, the energy involved, or to the arrangement or shape of the constructional parts or materials used.

Guards, where needed, must be fixed where possible, especially where access is rarely needed. They must be of robust construction and securely held in place. They must be fixed by systems that can be opened only with tools or keys.

Where frequent servicing is required, removable guards, as far as possible remaining fixed to the mobile machinery when open, fitted with a support system, and not needing a tool or key to open them, may be used provided that they are associated with a locking device such that the opening of the guard stops the moving parts and closure of the guard allows starting up only by voluntary action of the control provided.

In the case of internal combustion engines, access to the engine compartment, if any, must be prevented by removable guards; these need not have locking devices if they have to be opened either by the use of a tool or key, or a control located in the driving position if the latter is in a fully enclosed cab with a lock to prevent unauthorized access.

### 1.3.12.2 Moving parts involved in the working process

Where mobile machinery has a working position occupied by one or more operators, other than the driving position, moving parts involved in the working process and which, owing to their relative movement, speed, mass or the energy involved can cause accidents, notably due to impact, severing, crushing or ejection, must be designed, constructed, arranged or controlled in such a way that they are inaccessible during operation. Failing this, they must be fitted with guards or protective devices offering an equivalent degree of safety.

However, where all or part of certain such moving parts cannot be made inaccessible during operation owing to the need for operator intervention, they must, as far as is technically possible, be fitted with guards or protective devices limiting accessibility, preventing in particular access to the sections of the parts which are not used in the working process. They must be fitted with devices allowing the risk of any accident that occurs to be eliminated, such as emergency stop devices which are easily reached from the danger zone. Moreover, if the working position is not directly visible from the driving position, it must not be possible to start the movement from the driving position until the operators concerned have activated an enabling control.

All the necessary steps must be taken to prevent accidental blockage of moving parts involved in the work. If despite precautions taken a blockage occurs, the instruction manual and possibly a sign on the machinery should give the necessary instructions for safe unblocking.

#### 1.4 Protection against other hazards

##### 1.4.1 Electricity supply

Paragraph 1.5.1 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the addition of the following two paragraphs.

The battery housing must be so constructed and located as to reduce as far as possible the chance of electrolyte being ejected onto the operator in the event of rollover and/or to reduce the accumulation of vapours in places occupied by operators.

Mobile machinery must be designed and constructed to allow for easy disconnection of the battery.

##### 1.4.2 Static electricity

Paragraph 1.5.2 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

##### 1.4.3 Energy other than electricity

Paragraph 1.5.3 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

##### 1.4.4 Extreme temperatures

Paragraph 1.5.4 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.4.5 Fire

Paragraph 1.5.5 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the addition of the following two paragraphs:

Mobile machinery must be fitted, where its dimensions permit, with:

- mountings allowing easily accessible fire extinguishers to be fitted;
- or automatically triggered extinguisher systems. Such systems are compulsory for mobile machinery intended for use in underground mines and which is highly flammable.

Mobile machines with internal combustion engines for use in underground mines must operate on diesel fuel only. Their braking systems must be so designed and constructed as not to produce sparks or cause fires.

#### 1.4.6 Explosion

Paragraph 1.5.6 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.5.7 Noise

Paragraph 1.5.7 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the addition of the following paragraph:

Special attention must be given to requirements regarding noise in relation to the health of workers or to the environment, in accordance with the specific directives in force.

#### 1.4.8 Vibration

Paragraph 1.5.8 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.4.9 Radiation

Paragraph 1.5.9 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

#### 1.4.10 Emissions of dust, gases, etc.

Machinery must be so designed, constructed and/or equipped that hazards due to gases, liquids, dust, vapours, aerosols or other waste materials from the products it uses, processes or packages can be avoided.

Where a hazard exists, mobile machinery must be so equipped that the said substances can be collected for discharge in an area where there is no hazard, precipitated by water spraying, or treated in the case of harmful products which cannot be discharged untreated.

Collection or spraying equipment must be located as close as possible to the point of emission.

Where mobile machinery is designed to spread products, it must be equipped with a cab designed and constructed to ensure good working conditions for the driver.

Exhaust gases from internal combustion engines must be discharged in a way that is not hazardous to operators.



Exhaust gases from internal combustion engines of mobile machinery intended for use in underground mines must not be discharged upwards.

#### 1.4.11 Use of mobile machinery for lifting operations

Where the manufacturer envisages occasional use of mobile machinery for lifting operations or mobile machinery is equipped with accessories allowing such use, it must be designed and constructed to comply with the essential health and safety requirements relevant to such operations.

### 1.5 Maintenance

#### 1.5.1 Machinery maintenance

Paragraph 1.6.1 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the addition of the following paragraph:

The cleaning of internal parts of mobile machinery which have contained potentially toxic products must be possible without entering such internal parts; any necessary unblocking must also be possible from the outside.

#### 1.5.3 Isolation of power sources

Paragraph 1.6.3 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies.

## 1.6 Indicators

### 1.6.1 Warning devices

Paragraph 1.7.1 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies, with the addition of the following paragraph between the first and second paragraphs:

Where the health and safety of exposed persons depends on the correct operation of mobile machinery, it must be equipped with a warning device to indicate any unintended stoppage or fault in operation.

### 1.6.2 Signalling and warning

Mobile machinery must have means of signalling and, where appropriate, instruction plates concerning the use, adjustment and maintenance wherever necessary to ensure the health and safety of exposed persons. They must be so chosen, designed and constructed as to be easily perceived and durable. Instructions should preferably use readily understandable pictograms supplemented where necessary by texts in the languages of the country of use and, on request at the time of ordering, in the languages understood by the operators.

Without prejudice to the requirements to be observed for travelling on the public highway, mobile machinery with a ride-on driver must have the following equipment:

- an acoustic warning device to alert exposed and/or third persons,
- a system of light signals appropriate to the intended conditions of use, such as stop lights, reversing lights and rotating beacons. This latter requirement does not apply to mobile machinery intended solely for underground working and having no electrical power.

Mobile machinery whose use involves frequent reversing (such as: loaders, front-end loaders, bulldozers, graders, etc.) must, when the driver cannot see directly behind, be fitted with devices to alleviate his restricted vision.

Remote-controlled mobile machinery which under normal conditions of use exposes persons to impact hazards must be fitted with appropriate means to signal its movements and to protect exposed persons against such hazards.

Mobile machinery must be so constructed that all the warning and signalling devices cannot be disabled simultaneously. Where this is essential for safety, such devices must be provided with facilities for checking their correct operation and their failure must be clearly indicated to the operator.

Where the movement of mobile machinery or its tools is hazardous, signs must be provided to warn against approaching the machinery while it is working; signs must be legible at a sufficient distance to ensure the safety of persons who have to be in the vicinity.

### 1.6.3 Marking

The minimum particulars required by paragraph 1.7.3 of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery should be supplemented by the following:

after the fourth indent add the following indents

- power expressed in kW;
- mass, in kg, of the most usual configuration(s);
- technically possible trailer mass;
- permissible trailer coupling load or towbar pull.

At the end of the paragraph add the following:

Where a mobile machinery part has to be handled with lifting equipment, its mass must be indicated on it in a legible and durable manner. This is particularly important for parts of low volume but high mass.

Complete units of mobile machinery, designed to be towed, pushed or carried by mobile machinery or tractors must bear the same particulars.

#### 1.6.4 Instruction handbook

Paragraph 1.7.4. of the proposal for a Directive COM(87) 564 final, as amended by COM(88) 267 final, relating to machinery applies with the following amendments:

at the end of paragraph (a), add the following:

In the case of machinery allowing several uses depending on the equipment used:

- manufacturers of basic machinery (such as tractors) must give information regarding equipment which can be attached, notably fluid connections, forces and moments at fixing points, etc.;
- manufacturers of add-on equipment must give the complementary information: forces and moments created by the accessory, power consumption, etc.

paragraph (e) is replaced by the following:

The instruction handbook must give the following information concerning vibrations emitted by mobile machinery:

- level of vibrations transmitted to the upper limbs where the effective value of acceleration equivalent exceeds  $5 \text{ m/s}^2$ ,
- overall level of vibrations in the body (through the feet or seat) where the effective acceleration equivalent exceeds  $0.5 \text{ m/s}^2$ .

The operating conditions of the mobile machinery during measurement, the measurement points and the duration of measurements must be as specified in the applicable standard. If there is no applicable standard, the operating conditions must correspond to a work cycle representative of the normal use of the mobile machinery.

ANNEX II

A. EC Declaration of conformity<sup>1</sup>

The EC declaration of conformity must include the following:

- name and address of the manufacturer or his authorized representative established in the Community,<sup>2</sup>
- description of the machinery,<sup>3</sup>
- regulations with which the machinery complies,
- name and address of approved body and number of EC type-approval certificate, if any,
- for machinery referred to in Article 4, reference to harmonized standards where appropriate,
- identification of person empowered to sign on behalf of the manufacturer or his representative.

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<sup>1</sup> This declaration must be drawn up in the same language as the instruction handbook (see Annex I, paragraph 1.6.4), either typewritten or handwritten in block capitals.

<sup>2</sup> Business name and full address; authorized representatives must also give the business name and address of the manufacturer.

<sup>3</sup> Description of machinery (make, type, serial number, etc.).

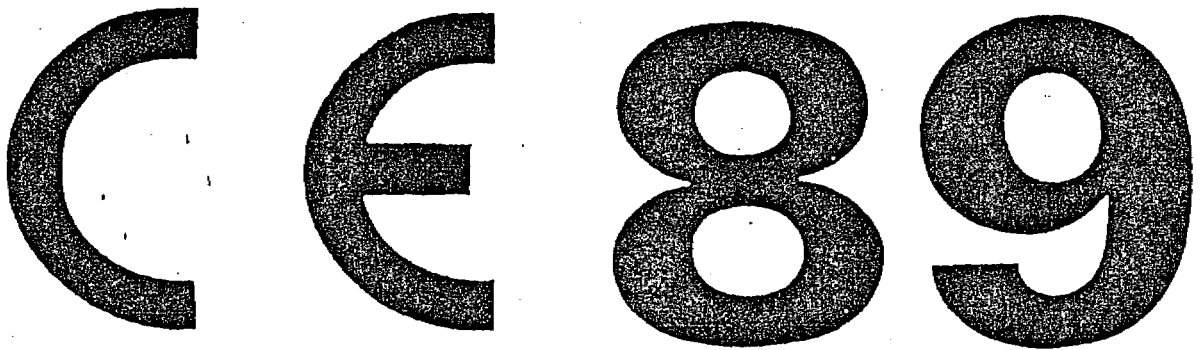
B. Manufacturer's declaration (Article 4(2))

The manufacturer's declaration referred to in Article 4(2) must include the following:

- name and address of the manufacturer,
- description of the machinery or machinery parts,
- statement that it may not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Directive,
- identification of person signing.

ANNEX III

Model EC mark



This mark should be followed by the last two digits of the year of manufacture in characters of the same height and thickness as the above model.

The EC mark must be at least 5 mm in height.

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ANNEX IV

Types of mobile machinery or parts thereof for which the procedure set out in Article 8(2)(b) must be applied

(EC type examination if the machinery does not conform entirely to a standard or the standards covering all the applicable essential safety requirements.)

1. Agricultural and forestry tractors

Shafts with universal joints.

2. Mobile machinery for underground mining and other extractive industries

(a) mobile machinery working on rails: locomotives and brake wagons

(b) internal combustion engines

(c) hydraulic powered roof supports.

ANNEX V

Declaration of conformity

1. The EC declaration of conformity is the instrument by means of which an authorized person representing the manufacturer, or his representative established in the Community,<sup>1</sup> declares that the mobile machinery being placed on the market complies with all the essential safety requirements applying to it.
  
2. The EC declaration of conformity authorizes the manufacturer, or his authorized representative in the Community, to affix the EC mark to mobile machinery.
  
3. Before drawing up the EC declaration of conformity, the manufacturer, or his authorized representative in the Community, must have ensured and be able to guarantee that the documentation listed below is and will remain available on his premises for the purposes of any inspection:
  - (a) a technical construction dossier comprising:
    - an overall drawing of the mobile machinery together with drawings of the control circuits;
  
    - full detailed drawings, accompanied by any calculation notes; test results, etc. required to manufacture the mobile machinery;

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<sup>1</sup> See also Article 8 paragraph 4.

- a list of
  - . the essential requirements of this Directive,
  - . other texts of regulations, and
  - . standardswhich were used when the mobile machinery was designed

- a description of the methods adopted to eliminate hazards presented by the mobile machinery;

- if so desired, any technical report or certificate obtained from a competent body;

- a copy of the instruction handbook for the mobile machinery.

(b) For series manufacture, the internal measures that will be implemented to ensure that the machinery remains in conformity with the provisions of the Directive.

4(a) The documentation referred to at 3(a) and (b) above need not permanently exist in a material manner but it must be possible to assemble it and make it available within a period of time commensurate with its importance.

It need not include detailed plans or any other specific information as regards the subassemblies used for the manufacture of the mobile machinery unless a knowledge of them is essential for verification of conformity with the essential safety requirements.

(b) The documentation referred to at 3(a) and (b) above must be retained and kept available for the competent national authorities under Article 23 for at least ten years following the date of manufacture of the mobile machinery or of the last unit produced in the case of series manufacture.

- (c) Where the competent national authorities under Article 2 consider that mobile machinery with an EC certificate of conformity and bearing the EC mark does not conform to the requirements of this Directive, they may consult the documentation kept available for them. Failure to present the documentation may constitute sufficient grounds for doubting the presumption of conformity with the requirements of the Directive.
  
- (d) The documentation referred to at 3(a) and (b) above must be drawn up in one of the official languages of the Community.

ANNEX VI

EC type examination

1. EC type examination is the procedure by which an approved inspection body ascertains and certifies that an example of mobile machinery satisfies the provisions of this Directive which apply to it.
2. EC type-examination is applied for by the manufacturer or his authorized representative established in the Community, with a single approved inspection body, in respect of an example of the mobile machinery.

The application should include:

- the name and address of the manufacturer or his authorized representative and the place of manufacturer of the machinery;
- a technical construction dossier comprising at least:
  - . an overall drawing of the mobile machinery together with drawings of the control circuits;
  - . full detailed drawings, accompanied by any calculation notes, test results, etc. required to manufacture the machinery;
  - . a description of methods adopted to eliminate hazards presented by the mobile machinery;
  - . a copy of the instruction handbook for the machinery;

- . for series manufacture, the internal measures that will be implemented to ensure that the mobile machinery remains in conformity with the provisions of the Directive.

It must be accompanied by a mobile machine representative of the planned production or, where appropriate, an indication of the place where the machinery can be examined.

The documentation referred to above need not include detailed drawings or any other specific information as regards subassemblies used in the manufacture of mobile machinery unless a knowledge of them is essential for verification of conformity with the essential safety requirements.

3. The notified body must carry out the EC type examination as described below:

- It examines the technical construction dossier to check its appropriateness and the mobile machinery supplied or made available.
- During the examination of the mobile machinery, the body must:
  - (a) ensure that it has been manufactured in conformity with the technical construction dossier and may safely be used under its intended working conditions;
  - (b) check that where standards have been used, they have been used correctly;
  - (c) perform appropriate examinations and tests to check that the mobile machinery complies with the essential requirements applicable to it.

4. If the example complies with the provisions applicable to it the body must issue an EC type-examination certificate and forward it to the applicant. The certificate sets out the conclusions of the examination, indicates any conditions to which its issue may be subject and includes any descriptions and drawings necessary to identify the approved pattern.

The Commission, Member States and the other approved bodies may obtain a copy of the certificate and, on a reasoned request, a copy of the technical construction dossier and the reports on the examinations and tests carried out.

5. The manufacturer or his authorized representative established in the Community must inform the notified body of all changes, even minor ones, which he has made or plans to make to the pattern of machinery concerned. The notified body examines the changes and informs the manufacturer or his authorized representative established in the Community as to whether the type-approval certificate is still valid.
6. A body which refuses to issue an EC type-examination certificate must so inform the other approved bodies. A body which withdraws an EC type-examination certificate must so inform the Member State which approved it. The latter must inform the other Member States and the Commission thereof, giving the reasons for the decision.
7. The dossiers and correspondence referring to the EC type-examination procedures must be drawn up in an official language of the Member State in which the approved body is established or in a language acceptable to it.

ANNEX VII

Minimum criteria to be taken into account by Member States  
when appointing inspection bodies

1. The inspection body, its director and the staff responsible for carrying out the verification tests may not be the designer, manufacturer, supplier or installer of machinery which they inspect, nor the authorized representative of any of those parties. They may not become directly involved in the design, construction, marketing or maintenance of the machinery. This does not preclude the possibility of exchanges of technical information between the manufacturer and the inspection body.
2. The inspection body and its staff shall carry out the verification tests with the highest degree of professional integrity and technical competence and shall be free from all pressures and inducements, particularly financial, which might influence their judgment or the results of the inspection, especially from persons or groups of persons with an interest in the result of verifications.
3. The inspection body shall have at its disposal the necessary staff and possess the necessary facilities to enable it to perform properly the administrative and technical tasks connected with verification; it shall also have access to the equipment required for special verification.
4. The staff responsible for inspection shall have:
  - a sound technical and professional training,
  - a satisfactory knowledge of the requirements of the tests they carry out and adequate experience of such tests,
  - the ability to draw up the certificates, records and reports required to authenticate the performance of the tests.



5. The impartiality of inspection staff shall be guaranteed. Their remuneration shall not depend on the number of tests carried out or on the results of such tests.
6. The inspection body shall take out liability insurance unless its liability is assumed by the State in accordance with national law, or the Member State itself is directly responsible for the tests.
7. The staff of the inspection body shall be bound to observe professional secrecy with regard to all information gained in carrying out its tasks (except vis-à-vis the competent administrative authorities of the State in which its activities are carried out) under this Directive or any provision of national law giving effect to it.

## FINANCIAL MEMORANDUM

on the proposal for a Council Directive on the approximation of the laws of the Member States relating to mobile machinery

### 1. Introduction

The proposal for a Directive relating to mobile machinery sets out the essential safety requirements with which mobile machinery must comply. Article 5 of the proposal makes a general reference to European standards, as a priority, or to national standards, as a temporary measure where there are no European standards. Mobile machinery manufactured in accordance with these standards is presumed to comply with the relevant essential health and safety requirements of the Directive.

As with other New Approach Directives the Commission intends to help to step up European standardization by giving CEN and/or CENELEC the task of preparing the necessary harmonized standards in the mobile machinery sector in accordance with the general guidelines for cooperation between the Commission, CEN and CENELEC, approved on 13 November 1984. This work will be carried out in the context of remits given to CEN and/or CENELEC, in application of the framework agreements signed on 10 October 1985 which allow for financial support from the Commission. The Commission will also endeavour to ensure proper participation by trade-union organizations in this context, and is at present studying a proposal from the ESC on the matter.

The work described above, which is of limited duration, must be integrated into the general framework of the management of the Directive, which is a long-term activity.

Any figures can only be rough estimates as the planning work for European standardization is in progress.

## 2. Budget lines affected

Article 775 : Community activities concerning the internal market

Item 7750 : Harmonization of industrial and labour legislation  
Multiannual activities for strengthening European  
standardization bodies

Article 648 : Community measures in the field of health

Item 6482 : Health protection, hygiene and safety at work

## 3. Legal basis

3.1 Council resolution of 7 May 1985 on a new approach to technical  
harmonization and standards.<sup>1</sup>

3.2 Directive to be adopted by the Council on the approximation of the laws  
of the Member States relating to mobile machinery.

3.3 Communication from the Commission on its programme in the field of  
safety, hygiene and health at work.

## 4. Proposed classification

Non-compulsory expenditure.

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<sup>1</sup> OJ no. C 136, 4.6.1985.

## 5. Description and justification of the activities

### 5.1 Objectives

The planned activities should help in particular with the preparation of harmonized standards satisfying the essential health and safety requirements of the mobile machinery Directive, without which the Directive would be very difficult to apply. Moreover, the harmonized standards will help to boost the competitiveness of European industry and improve the safety of mobile machinery users.

### 5.2 Parties concerned

In accordance with the Council resolution of 7 May 1985 standardization work is not the Commission's responsibility but rather that of the European standards organizations. The Commission communication referred to in section 3.3 provides for trade-union participation in this context.

## 6. Type of expenditure and method of calculation

### 6.1 Type

Remits under the framework agreement of 10 October 1985 between the Commission and CEN/CENELEC, and support to trade-union organizations.

### 6.2 Calculation

The amount of the financing of standardization services will be determined for each order voucher on the basis of the work given to contractors.

It comprises the expenses borne by the central units of the European standards bodies for the implementation of the standardization programmes entrusted to them and a certain contribution to the expenses of the committees and technical working parties for the execution of these programmes. In addition to these expenses are the private expenses of experts assigned specific work in this context.

These expenses are calculated on the basis of the man-month unit which is currently worth 5 000 ECU.

The amount of the financing of the trade-union participation will be determined by the number of European standards in preparation and the scope of the work.

The work of preparing the harmonized standards will certainly continue beyond the first five years.

## 7. Financial impact of the activity on operating appropriations

### 7.1 Schedule of commitment and payment appropriations:

(item 7750)

	CAs (ECU)	PAs (ECU)
1989	1 000 000	500 000
1990	1 000 000	1 000 000
1991	2 000 000	1 000 000
1992	1 000 000	1 000 000
1993	p.m.	1 500 000
	5 000 000	5 000 000

(item 6482)

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	CAs (ECU)	PAs (ECU)
1989	300 000	300 000
1990	300 000	300 000
1991	300 000	300 000
1992	300 000	300 000
1993	300 000	300 000
	1 500 000	1 500 000

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#### 7.2 Community share of financing

Since those involved in standardization work in principle pay their own expenses, the Community contribution to the financing of the work should not amount to more than 50% of the total expenses.

It should however be noted that the Community contribution will be reduced if the EFTA countries decide to take part in this standardization work.

The Community contribution to the financing of trade-union participation should cover most of this expenditure.

#### 8. Observations

None

**9. Financial impact of the activity on the staff and administrative appropriations**

**9.1 Staff required to work solely on this activity**

This activity also includes the work of managing the mobile machinery Directive which will require substantial full-time assistance from the relevant Commission departments (DG III and DG V).

From 1989 this work will require :

- for DG III one A grade official full time and two B grade officials full time.
- for DG V one A grade official full time and one B grade official full time.

**9.2 & 9.3 Staff and administrative appropriations**

The necessary appropriations are estimated at :

- 240 000 ECU a year for DG III;
- 180 000 ECU a year for DG V.

## FICHE D'IMPACT SUR LA COMPETITIVITE ET L'EMPLOI

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### 1. Quelle est la justification principale de la mesure ?

La fabrication de machines représente un noyau important de l'économie communautaire; les machines mobiles, utilisées dans des secteurs importants de cette économie à savoir l'agriculture, la sylviculture et la construction, y compte pour une part importante.

Or, dans les divers Etats Membres les législations nationales dans le domaine des machines mobiles divergent considérablement tant en matière de sécurité qu'en matière de certification. En outre, des spécifications techniques obligatoires de facto et des normes, en principe volontaires, mais dont leur respect constitue une condition préalable réelle pour la mise sur le marché, sont souvent incompatibles entre les différents pays de la Communauté. Cette disparité gêne le commerce intracommunautaire en entraînant des entraves techniques à la libre circulation de marchandises à l'intérieur de la Communauté s'opposant ainsi à l'achèvement du Marché Intérieur.

La présente proposition de directive cherche à assurer la libre mise sur le marché ainsi que la mise en service des machines mobiles répondant aux exigences essentielles de sécurité et de santé qu'elle a établi et qui doivent être dûment attestées.



II. Caractéristiques des entreprises concernées.

En particulier:

Y a-t-il un grand nombre de PME ?

De grandes sociétés comprenant plusieurs multinationales représentent la majorité de la construction de machines mobiles utilisées dans le secteur de la construction. L'équipement pour les mines est également très spécialisé. Cependant des sociétés de toutes dimensions sont impliquées dans les différentes industries avec des sociétés de dimensions petites et moyennes jouant un rôle important en particulier pour la fabrication des machines mobiles à usage agricole et forestier (à l'exception des tracteurs).

Note-t-on des concentrations dans des régions:

- éligibles aux aides régionales des E.M. ?

Non.

- éligibles au Fader ?

Non.

III. Quelles sont les obligations imposées directement aux entreprises ?

A partir de la date de mise en vigueur de la présente directive, toutes les machines mobiles visées devront être conçues, construites et équipées de façon telle qu'elles satisfassent aux dispositions de la directive. Chacune des machines mobiles fabriquées devra être accompagnée d'une déclaration CE de conformité et munie de la marque CE. Un très grand effort s'imposera aux fabricants de machines mobiles pour que leur production puisse satisfaire aux exigences essentielles de sécurité et de santé. En effet, beaucoup de modèles existants devront être revus pour tenir compte de la philosophie de la directive, c'est-à-dire l'intégration de la sécurité dès la conception de la machine.

IV. Quelles sont les obligations susceptibles d'être imposées indirectement aux entreprises via les autorités locales ?

L'application de la directive dans chaque Etat Membre se réalise par la transposition de ses dispositions au niveau de la législation nationale. Les autorités régionales ou locales peuvent faire valoir des obligations additionnelles seulement si celles-ci n'impliquent pas de modifications de ces machines mobiles par rapport aux dispositions de la directive et notamment aux exigences essentielles de sécurité et de santé.

V. Y a-t-il des mesures spéciales pour les PME ?

Non.

VI. Quel est l'effet prévisible ?

"-sur la compétitivité des entreprises?

Le coût supplémentaire de mise en conformité avec la directive peut être estimé comme suit:

Pour les grosses sociétés, ainsi que les sociétés de taille moyenne mais vendant dans plusieurs pays, qui représentent environ 80% de la production, le coût supplémentaire peut être considéré comme négligeable. Par contre la mise sur le marché d'un modèle unique de machine mobile munie de la marque CE conduira à une diminution des coûts de fabrication et de commercialisation. Le gain de productivité lié à l'effet d'échelle peut être estimé (d'après "1992 : la nouvelle économie européenne", étude de Michael Emerson) à plus de 5% du coût des machines et, en tout état de cause, nettement supérieur au coût supplémentaire de mise en conformité.

Pour les petites sociétés fabricant du matériel agricole dans un cadre régional, le gain dû à l'effet d'échelle n'existe pas. Il est difficile d'évaluer le coût de mise en conformité car ces sociétés ne font pas partie, en général, des organisations professionnelles consultées. Selon l'état des réglementations, et leur respect pratique, dans chaque état membre, ce coût pourra varier de 3 à 10%."

- sur l'emploi ?

La diminution des coûts de commercialisation devrait conduire à une amélioration générale de la compétitivité des entreprises européennes de machines mobiles et donc, on peut espérer un effet favorable sur le marché du travail.

VII. Les partenaires sociaux ont-ils été consultés ? Oui.

- avis des partenaires sociaux

Les partenaires sociaux, notamment CECE pour les fabricants d'équipements pour la construction et CEMA pour les machines mobiles agricoles et forestières et la Confédération Européenne des Syndicats, CES, pour les syndicats ouvriers, ont participé de façon active au sein du groupe d'experts contribuant directement à la préparation de la présente proposition de directive. Leurs observations ont été essentiellement techniques sur telle ou telle exigence. Sur le plan économique, elles attendent avec impatience la directive.

Le groupe ad-hoc Machines du Comité Consultatif pour la sécurité, l'hygiène et la protection de la santé sur les lieux de travail a étudié la proposition et a formulé un avis favorable. Une délégation de ce groupe ad-hoc a participé aux travaux du groupe d'experts. Le Comité Consultatif est actuellement consulté et son avis devrait être émis prochainement.

L'Organe permanent pour la santé et la salubrité dans les mines de houille et autres activités extractives a également été consulté et a estimé que les machines mobiles pour l'industrie minière pourraient faire partie intégrante du champ d'application de la proposition.