



COMMISSION OF THE EUROPEAN COMMUNITIES

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Amended proposal for a

COUNCIL DIRECTIVE

**ON MINIMUM REQUIREMENTS FOR IMPROVING THE SAFETY AND HEALTH
PROTECTION OF WORKERS POTENTIALLY AT RISK FROM EXPLOSIVE
ATMOSPHERES**

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

EXPLANATORY MEMORANDUM

The Commission submitted the original proposal for this Directive to Council on 18 September 1995.¹

The proposal is based on Article 118A of the EC Treaty in the form of an individual directive under Article 16(1) of Council Directive 89/391/EEC² on the introduction of measures to encourage improvements in the health and safety of workers at work.

The aims of the proposal are :

- a) to adopt, as provided for in Article 118A of the Treaty, the minimum requirements for the safety and health protection of workers potentially at risk from explosive atmospheres ;
- b) to establish specific provisions to improve the safety and health protection of workers potentially at risk from explosive atmospheres in strict compliance with the principles set out in Directive 89/391/EEC ;
- c) to create a suitable framework for explosion protection for industry in general, such as already exists for the mineral-extracting industries (Directives 92/91/EEC³ and 92/104/EEC⁴).

This proposal supplements Directive 94/9/EC⁵ of 23 March 1994 on the approximation of laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres. Equipment and protective systems covered by this directive are divided into categories. For the proper use of these categories, the workplaces in which explosive atmospheres may be present must be classified in terms of zones. One of the purposes of this proposal is to create a standard legal basis for the zoning, based on a risk assessment of the workplaces where the equipment is to be used allowing for the adequate selection of equipment with the suitable level of protection for each zone.

The Economic and Social Committee rendered a favorable opinion during its 333rd plenary session on 28 and 29 February 1996.

Subsequent to the opinion of the European Parliament (first reading) of 20 June 1996, the Commission herewith presents to the Council, under Article 189a(2) of the EC Treaty, an amended proposal for a Directive. The text contains two main types of amendments :

- one group incorporates the European Parliament amendments accepted by the Commission
- a second group addresses editorial and linguistic problems trying to make the texts in the different languages coherent in particular as Council directive 94/9/EC is concerned.

Regarding the first group it must be noted that Parliament established 14 amendments (Annex 1) four of which the Commission did not accept, the others were accepted in part or in total.

Concerning the four amendments which were not taken into account.

- Amendment N° 6 was considered unacceptable since Article 9 covers requirements on both workplaces and work equipment ;

¹ OJ No C332, 9.12.1995, p. 10

² OJ No L183, 29.6.1989, p. 1

³ OJ No L348, 28.11.1992, p. 9

⁴ OJ No L404, 31.12.1992, p. 10

⁵ OJ No L100, 19.4.1994, p. 1

- Amendment N° 9, was considered to introduce uncertainty regarding the entering into force of the directive. However the Commission supported the concept underlying the amendment. It indicated that during the inter-institutional negotiations, it will bear in mind this idea to ensure that information is promptly provided to all parties concerned.
- Amendment N° 10 was considered not acceptable as the proposed reference does not add anything essential but could create legal uncertainty. However, the Commission clarifies its original text by deleting the words, "and the assessment of the anticipated effects" in order to bring the text more in line with ISO standards in the domain.
- Finally, regarding amendment N° 12, it was felt that this amendment renders the text too restrictive and imposes an unnecessary constraint on undertakings, in particular small and medium-sized enterprises and therefore was not accepted.

Concerning, the amendments that were accepted either partly or totally :

- Regarding amendment N° 2, it was felt that the first part of the amendment clarifies the text of the original proposal. In contrast the last paragraph collides with the risk assessment philosophy as it imposes the application concurrently and simultaneously of the three basic principles, rendering the text unnecessarily stringent.
- Regarding amendment N° 3, the substitution of "responsible supervision" by "appropriate supervision" also reflects the opinion of ECOSOC and is acceptable. However including "training and education" in this context is meaningless as far as supervision is concerned. The last paragraph of the amendment cannot be accepted since it adds nothing to what is already stated in Article 4.4 of the proposal and Article 6 of the Framework Directive (89/391/EEC).
- Regarding amendment N° 4, the Commission considers that the amendment is acceptable with a slightly different wording in line with the Commission's original text which specifies that the employer "shall ensure" that an explosion protection document is drawn up and kept up-to-date. Otherwise, the employer will be obliged to draw up this document himself, which would impose unacceptable constraints on small and medium-sized enterprises.
- Regarding amendment N° 7, the Commission considers that the deletion of "work equipment" is a logical consequence of the wording of Article 9, paragraph 1 and 2. However, workplaces already in use before entry into force of this directive have to comply with all the minimum requirements specified in the proposal and not only those of Article 4.
- With respect to amendment N° 8, the Commission considers that the deletion of the reference to Article 17 of the Framework Directive renders the text imprecise since the amendment does not specify who draws up the vademecum. As a consequence, it should be complemented in a way indicating that the Commission will draw up the Vademecum in accordance with the procedure laid down under Article 17 of Directive 89/391/EEC, modifications and supplements shall be subject to the same procedure.

Five amendments N° 1, 5, 11, 13 and 14 improve the original text, and are totally accepted by the Commission. In particular the last one provides for early information to small and medium-sized enterprises which will facilitate their adaptation to the requirements of the directive.

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COUNCIL DIRECTIVE
ON MINIMUM REQUIREMENTS FOR IMPROVING THE SAFETY AND HEALTH
PROTECTION OF WORKERS POTENTIALLY AT RISK FROM EXPLOSIVE
ATMOSPHERES

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

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

Original Commission Proposal	Modified Proposal
<p>PROPOSAL FOR A COUNCIL DIRECTIVE ON MINIMUM REQUIREMENTS FOR IMPROVING THE SAFETY AND HEALTH PROTECTION OF WORKERS POTENTIALLY AT RISK FROM EXPLOSIVE ATMOSPHERES</p>	
<p>THE COUNCIL OF THE EUROPEAN UNION</p>	
<p>Having regard to the Treaty establishing the European Community, and in particular Article 118a thereof,</p>	<p>unchanged</p>
<p>Having regard to the Commission proposal¹ submitted after consultation with the Advisory Committee on Safety, Hygiene and Health Protection at Work and the Safety and Health Commission for the Mining and Other Extractive Industries,</p>	<p>unchanged</p>
<p>In cooperation with the European Parliament²,</p>	<p>unchanged</p>
<p>Having regard to the opinion of the Economic and Social Committee³,</p>	<p>unchanged</p>
<p>Whereas Article 118a of the Treaty provides that the Council shall adopt, by means of directives, minimum requirements designed to encourage improvements, especially in the working environment, as regards the health and safety of workers;</p>	<p>unchanged</p>
<p>Whereas, under the terms of that Article, those directives are to avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized undertakings;</p>	<p>unchanged</p>
<p>Whereas the improvement of occupational safety, hygiene and health is an objective which should not be subordinated to purely economic considerations;</p>	<p>unchanged</p>
<p>1 OJ No C....., p. 2 OJ No C....., p. 3 OJ No C....., p.</p>	

Original Commission Proposal	Modified Proposal
<p>Whereas compliance with the minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres is essential to ensure workers' safety and health protection;</p>	<p>unchanged</p>
<p>Whereas this Directive is an individual directive within the meaning of Article 16 (1) of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work⁴; whereas, therefore, the provisions of the said Directive are also fully applicable to cases in which workers are potentially at risk from explosive atmospheres without prejudice to more restrictive or specific provisions contained in this Directive;</p>	<p>unchanged</p>
<p>Whereas this Directive constitutes a practical step towards the achievement of the social dimension of the internal market;</p>	<p>unchanged</p>
<p>Whereas the recitals to Parliament and Council Directive 94/9/EC on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres state that it is intended to prepare an additional directive based on Article 118a covering, in particular, explosion hazards which derive from a given use and/or types and methods of installation of equipment;</p>	<p>Whereas Directive 94/9/EC of 23 March 1994 of European Parliament and Council on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres⁵ states that it is intended to prepare an additional directive based on Article 118a covering, in particular, explosion hazards which derive from a given use and/or types and methods of installation of equipment;</p>
<p>Whereas explosion protection is of particular importance to safety; whereas explosions endanger the lives and health of workers as a result of the uncontrolled effects of flame and pressure, the presence of noxious reaction products and consumption of the oxygen in the ambient air which workers need to breathe;</p>	<p>unchanged</p>
<p>⁴ OJ No L 183, 29.6.1989, p. 1</p>	<p>⁵ OJ No L 100, 19.4.1994, p. 1</p>

Original Commission Proposal	Modified Proposal
<p>Whereas explosions are characterised by the extreme rapidity with which they occur and the danger of propagation within interlinked installations; whereas manual intervention after an ignition is normally impossible; whereas, therefore, the minimum requirements for improving the safety and health protection of workers at risk from explosive atmospheres place special emphasis on the need for analysis to forecast the potential danger and the need for all necessary protective measures to be included right from the planning stage;</p>	<p>deleted</p>
<p>Whereas the large number of potential explosion risks necessitates an overall assessment of places of work, in the context of which it becomes increasingly important, in line with technical development, to take account of logical (software) malfunctions in automatically controlled processes;</p>	<p>deleted</p>
<p>Whereas the organisational aspects of explosion protection must be adapted to the technical problems occurring at places of work so that no weaknesses arise in the explosion protection arrangements; whereas Directive 89/391/EEC requires the employer to be in possession of an assessment of the risks to workers' safety and health at work; whereas this requirement is to be regarded as being amplified by the present Directive in that it provides that the employer shall draw up an explosion protection document and keep it up to date; whereas this explosion protection document may be part of the assessment of the risks to safety and health at work required by Article 9 (1)a of Directive 89/391/EEC; whereas the explosion protection document must contain the necessary measures for the safety and health protection of workers potentially at risk from explosive atmospheres;</p>	<p>Whereas the establishment of a coherent strategy for the prevention of explosions requires that organisational measures complement the technical measures taken at the workplace; whereas Directive 89/391/EEC requires the employer to be in possession of an assessment of the risks to workers' safety and health at work; whereas this requirement is to be regarded as being specified by the present Directive in that it provides that the employer shall draw up an explosion protection document or set of documents which satisfy the minimum requirements laid down in this Directive and keep it up to date; whereas the explosion protection documents may be part of the assessment of the risks to safety and health at work required by Article 9 (1)a of Directive 89/391/EEC; whereas the explosion protection documents must contain the necessary measures for the safety and health protection of workers potentially at risk from explosive atmospheres;</p>

Original Commission Proposal	Modified Proposal
<p>Whereas an assessment of explosion risks may be required under other Community legislation; whereas, in order to avoid unnecessary duplication of work, the employer should be allowed, in accordance with national practice, to combine documents, parts of documents or other equivalent reports produced in response to other legislation to form a single "safety report";</p>	<p>Whereas an assessment of explosion risks may be required under other Community acts; whereas, in order to avoid unnecessary duplication of work, the employer should be allowed, in accordance with national practice, to combine documents, parts of documents or other equivalent reports produced under other Community acts to form a single "safety report";</p>
<p>Whereas preventive measures must be supplemented if necessary by additional measures which become effective when ignition has taken place; whereas maximum safety can be achieved only by combining preventive and supplementary measures and taking account of operational conditions and the necessary maintenance;</p>	<p>Whereas preventive measures must be supplemented if necessary by additional measures which become effective when ignition has taken place; whereas maximum safety can be achieved by combining preventive measures and other additional measures limiting the detrimental effects of explosions on workers;</p>
<p>Whereas the prevention of explosive atmospheres as a general rule has priority; whereas in cases in which this is not possible in the current state of the art the ignition of explosive atmospheres must be prevented and the effects of any explosion kept within acceptable limits; whereas employers have a duty to make provision for all necessary safety measures and systems;</p>	<p>deleted</p>
<p>Whereas Directive 94/9/EC, which applies without restriction from 1 July 2003, divides the equipment and protective systems which it covers into equipment groups and categories; whereas the present Directive provides for a classification of the places where explosive atmospheres may occur in terms of zones; whereas this classification is to be carried out by the employer and relates to the place of use;</p>	<p>Whereas Directive 94/9/EC divides the equipment and protective systems which it covers into equipment groups and categories; whereas the present Directive provides for a classification by the employer of the places where explosive atmospheres may occur in terms of zones and determines which equipment and protective systems groups and categories should be used in each zone;</p>
<p>Whereas the requirements formulated in this Directive may not be adequate in all cases to prevent danger from hazards due to explosive mixtures under conditions other than atmospheric conditions or with co-reactants other than air, so that further measures are required;</p>	<p>deleted</p>

Original Commission Proposal	Modified Proposal
<p>Whereas the scope of this Directive does not include medical facilities used directly for the treatment of patients, where particular importance attaches to the protection of patients in addition to workers' safety and health protection; whereas in such places the minimum requirements laid down in this Directive may not be sufficient in all cases;</p>	deleted
<p>Whereas the scope of this Directive does not include the normal use of appliances burning gaseous fuels, since Council Directive 90/396/EEC⁵ of 29 June 1990 on the approximation of the laws of the Member States relating to appliances burning gaseous fuels contains essential requirements concerning the placing on the market and bringing into service of such appliances, which are applicable both to the appliances themselves and to their installation, so as to ensure that the safety of persons, domestic animals and property is not compromised;</p>	deleted
<p>Whereas the scope of this Directive does not encompass handling of explosives and chemically unstable substances, since its requirements may not be sufficient in all cases and special measures may therefore be necessary;</p>	deleted
<p>Whereas the scope of this Directive does not encompass the mineral-extracting industries as defined in Directives 92/91/EEC and 92/104/EEC, which relate to the protection of workers in these industries and already cover the question of explosion protection; whereas the minimum requirements laid down in those Directives are stricter than those in the present Directive on account of the greater potential hazard in the mineral-extracting industries;</p>	deleted
<p>Whereas the scope of this Directive does not encompass the use of means of transport, including sea-going vessels, on which the pertinent provisions of the international agreements (ADR, IMO, etc.) apply, since these already ensure protection of workers,</p>	deleted
<p>⁵ OJ No L 196, 26.7.1990, p. 15</p>	

Original Commission Proposal	Modified Proposal
HAS ADOPTED THIS DIRECTIVE:	unchanged
SECTION I	
GENERAL PROVISIONS	
Article 1	
Subject	
(1) This Directive, which is the ... individual directive within the meaning of Article 16 (1) of Directive 89/391/EEC, lays down minimum requirements for the safety and health protection of workers potentially at risk from explosive atmospheres as defined in Article 2.	unchanged
(2) This Directive does not apply to	unchanged
a) medical facilities used directly for the treatment of patients;	
b) normal use of appliances burning gaseous fuels as defined in Directive 90/396/EEC;	b) use of appliances burning gaseous fuels in compliance with Directive 90/396/EEC ⁶ ;
c) manufacture, handling, storage and transport of explosives or chemically unstable substances.	unchanged
d) establishments of the mineral-extracting industries covered by Directive 92/91/EEC or Directive 92/104/EEC;	d) mineral-extracting industries covered by Directive 92/91/EEC ⁷ or Directive 92/104/EEC ⁸ ;
e) use of means of transport, including sea-going vessels, on which the pertinent provisions of the international agreements (ADR, IMO, etc.) apply.	e) use of means of transport, including sea-going vessels, on which the pertinent provisions of the international agreements (ADR, IMO) apply.
(3) The provisions of Directive 89/391/EEC and the pertinent individual directives are fully applicable to the domain referred to in paragraph 1, without prejudice to more restrictive and/or specific provisions contained in this Directive.	unchanged
	<p>6 OJ No L 196, 26.7.1990, p. 15</p> <p>7 OJ No L 348, 28.11.1992, p. 9</p> <p>8 OJ No L 404, 31.12.1992, p. 10</p>

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<p>Article 2</p> <p>Definition</p> <p>For the purposes of this Directive, an explosive atmosphere shall be a mixture with air, under atmospheric conditions, of flammable substances in the form of gases, vapours, mists or dusts in which, after ignition has occurred, combustion spreads to the entire unburned mixture.</p> <p>SECTION II</p> <p>OBLIGATIONS OF THE EMPLOYER</p> <p>Article 3</p> <p>Principles for the prevention of and protection against explosions</p> <p>With a view to preventing and providing protection against explosions, the employer shall take technical and/or organisational measures appropriate to the nature of the operation, in accordance with the following basic principles, in order to:</p> <ul style="list-style-type: none"> - prevent the formation of explosive atmospheres, - prevent the ignition of explosive atmospheres, - reduce the effects of an explosion in such a way that workers are not at risk. <p>Article 4</p> <p>General obligations</p> <p>(1) To ensure the safety and health of workers, and in accordance with the basic principles laid down in Article 3, the employer shall take the necessary measures so that:</p>	<p>unchanged</p> <p>Article 3</p> <p>Principles for the prevention of and protection against explosions</p> <p>With a view to preventing, within the meaning of Article 6, paragraph 2 of Directive 89/391/EEC, and providing protection against explosions, the employer shall take technical and/or organisational measures appropriate to the nature of the operation, in accordance with the following basic principles:</p> <ul style="list-style-type: none"> - the prevention of the formation of explosive atmospheres, - the avoidance of the ignition of explosive atmospheres, - the reduction of the effects of an explosion in such a way that workers are not at risk. <p>Article 4</p> <p>General obligations</p> <p>(1) To ensure the safety and health of workers, and in accordance with the basic principles laid down in Article 3, the employer shall take the necessary measures so that:</p>

Original Commission Proposal	Modified Proposal
<ul style="list-style-type: none"> - where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers, the working environment is such, given the appropriate measures, that workers can perform the work assigned to them without danger to their safety and health or to the safety and health of others, - responsible supervision is ensured during the presence of workers in working environments where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers, - work during which workers may be at risk from explosive atmospheres is carried out only by competent persons or under their supervision, - where necessary, workers wear only working clothes or personal protective equipment suitable for use in places where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers. 	<ul style="list-style-type: none"> - where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers, the working environment is such that workers can perform the work assigned to them without danger to their safety and health or to the safety and health of others, - appropriate supervision during the presence of workers shall be ensured, including the use of monitoring devices and modern technical means, in working environments where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers <p style="text-align: center;">unchanged</p> <ul style="list-style-type: none"> - where explosive atmospheres may arise in such quantities as to endanger the health and safety of workers only appropriate working clothes and/or personal protective equipment are worn by workers.
<p>(2) Without prejudice to Council Directives 89/654/EEC, 89/655/EEC and 92/57/EEC, the employer shall ensure :</p> <ul style="list-style-type: none"> - in accordance with the principle of overall assessment of the place of work, that work equipment and all installation materials are suitable for use in places where explosive atmospheres may arise and are so erected, installed and assembled that they do not give rise to an explosion risk; - that the measures required under Article 3 are combined or supplemented as necessary and that the necessary measures against the propagation of explosions are taken; 	<p>(2) Without prejudice to Council Directives 89/654/EEC⁹, 89/655/EEC¹⁰ and 92/57/EEC¹¹, the employer shall ensure :</p> <ul style="list-style-type: none"> - in accordance with the principle of overall assessment of the workplace, that work equipment and all installation materials are suitable for use in places where explosive atmospheres may arise and are erected, installed and assembled so that they do not give rise to an explosion risk; - that the measures required under Article 3 are where necessary combined and where necessary supplemented with measures against the propagation of explosions; <p>9 OJ No L 393, 30.12.1989, p. 1 10 OJ No L 393, 30.12.1989, p. 13 11 OJ No L 245, 26.08.1992, p. 6</p>

Original Commission Proposal	Modified Proposal
<ul style="list-style-type: none"> - where necessary, that appropriate emergency routes are indicated and escape and rescue facilities are provided and maintained to ensure that workers can leave endangered places promptly and safely in the event of danger. 	<ul style="list-style-type: none"> - where necessary, that appropriate emergency routes are indicated and escape and rescue facilities are provided and maintained to ensure that in the event of danger workers can leave endangered places promptly and safely.
<p>(3) Following an appropriate health and safety policy, the employer shall ensure that a health and safety plan for explosion protection measures, hereinafter referred to as the "explosion protection document", satisfying the pertinent requirements of Articles 6, 9 and 10 of Directive 89/391/EEC, is drawn up and kept up to date.</p>	<p>(3) The employer shall ensure that a health and safety document for explosion protection measures, hereinafter referred to as the "explosion protection document", which may be a document or set of documents, satisfying the pertinent requirements of Articles 6 and 9 of Directive 89/391/EEC, is drawn up and kept up to date.</p>
<p>The explosion protection document shall demonstrate in particular:</p>	<p>unchanged</p>
<ul style="list-style-type: none"> - that the explosion risks incurred by the workers have been determined and assessed; 	<p>unchanged</p>
<ul style="list-style-type: none"> - that adequate measures will be taken to attain the aims of this Directive; 	<p>unchanged</p>
<ul style="list-style-type: none"> - that the workplace and work equipment including warning devices are designed operated and maintained with due regard for safety; 	<p>unchanged</p>
<ul style="list-style-type: none"> - that, in accordance with Directive 89/655/EEC, arrangements have been made for the safe use of work equipment. 	<p>unchanged</p>
<p>The explosion protection document shall be drawn up prior to the commencement of work and be revised if the working environment, in particular the workplace, work equipment or organisation of the work, has undergone significant changes, extensions or conversions.</p>	<p>The explosion protection document shall be drawn up prior to the commencement of work and be revised when the workplace, work equipment or organisation of the work, undergoes significant changes, extensions or conversions.</p>
<p>(4) Where workers from several undertakings are present at the same workplace, each employer shall be responsible for all matters under his control.</p>	<p>(4) Where workers from several undertakings are present at the same workplace, each employer shall be responsible for all matters coming under his control.</p>

Original Commission Proposal	Modified Proposal
<p>The employer responsible for the workplace in accordance with national law and/or practice shall coordinate the implementation of all the measures concerning workers' safety and health and shall state, in his explosion protection document, the aim of that coordination and the measures and procedures for implementing it.</p>	<p>unchanged</p>
<p>The coordination shall not affect the responsibility of the individual employers as provided for in Directive 89/391/EEC.</p>	<p>The coordination shall not affect the individual responsibility of each employer as provided for in Directive 89/391/EEC.</p>
<p>Article 5</p>	
<p>Places containing explosive atmospheres</p>	<p>Places where explosive atmospheres may occur</p>
<p>(1) The employer shall specify in the explosion protection document the places to which the minimum requirements laid down in Annex II apply.</p>	<p>unchanged</p>
<p>He shall classify places where explosive atmospheres may occur in accordance with Annex I.</p>	<p>He shall classify places, where explosive atmospheres may occur, into zones in accordance with Annex I.</p>
<p>(2) In respect of the places covered by paragraph 1, the employer shall ensure compliance with the relevant provisions of the minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres as laid down in Annex II.</p>	<p>(2) The employer shall ensure that the minimum requirements laid down in Annex II are applied to places covered by paragraph 1.</p>
<p>Annex IV provides guidance on the performance of work in the various zones.</p>	<p>unchanged</p>
<p>(3) Where necessary, places where explosive atmospheres may arise in such quantities as to endanger the safety and health of workers shall be marked with signs at the points of entry to them, in accordance with Annex III.</p>	<p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>Article 6</p> <p>Worker information</p> <p>Without prejudice to Article 10 of Directive 89/391/EEC, workers and/or their representatives shall be informed of all measures to be taken concerning safety and health at work, in particular those taken in pursuance of Articles 3 to 5 of this Directive.</p>	<p>unchanged</p>
<p>Article 7</p> <p>Consultation and participation of workers</p> <p>Consultation and participation of workers and/or of their representatives shall take place in accordance with Article 11 of Directive 89/391/EEC on all matters covered by this Directive.</p>	<p>unchanged</p>
<p>Article 8</p> <p>Training of workers</p> <p>Without prejudice to Article 12 of Directive 89/391/EEC, the employer shall take the necessary steps to ensure that workers potentially at risk from explosive atmospheres receive appropriate training, in particular in pursuance of Articles 3 to 5 of this Directive.</p>	<p>unchanged</p>
<p>Article 9</p> <p>Special requirements for work equipment and workplaces</p> <p>(1) Work equipment for use in places where explosive atmospheres may occur which is made available in the undertaking or establishment for the first time after the entry into force of this Directive and up to 30 June 2003 shall comply with the minimum requirements laid down in Annex II A, if no other Community directive is applicable or is so only partially.</p>	<p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>(2) Work equipment for use in places where explosive atmospheres may occur which is made available in the undertaking or establishment for the first time after 30 June 2003 shall comply with the minimum requirements laid down in Annex II A and B.</p>	<p>unchanged</p>
<p>(3) Workplaces which contain places where explosive atmospheres may occur and which are used for the first time after the entry into force of this Directive shall comply with its minimum requirements.</p>	<p>unchanged</p>
<p>(4) Where work equipment and workplaces which contain places where explosive atmospheres may occur are already in use before the entry into force of this Directive, they shall comply with its minimum requirements no later than three years after its entry into force.</p>	<p>(4) Where workplaces which contain places where explosive atmospheres may occur are already in use before the entry into force of this Directive, they shall comply with its minimum requirements no later than three years after its entry into force.</p>
<p>(5) If, after this Directive enters into force, any modification, extension or restructuring is undertaken in workplaces containing places where explosive atmospheres may occur, the employer shall take the necessary steps to ensure that these comply with this Directive's minimum requirements.</p>	<p>unchanged</p>
<p>SECTION III</p>	
<p>MISCELLANEOUS PROVISIONS</p>	
<p>Article 10</p>	
<p>Adjustments to the Annexes</p>	
<p>Purely technical adjustments to the Annexes of this Directive made necessary by</p>	<p>unchanged</p>
<p>- the adoption of directives on technical harmonisation and standardisation in the field of explosion protection,</p>	
<p>and/or</p>	

Original Commission Proposal	Modified Proposal
<p>- technical progress, changes in international regulations or specifications, and new findings on the prevention of and protection against explosions</p> <p>shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.</p> <p>Article 11</p> <p>Vademecum</p> <p>A vademecum shall be drawn up in agreement with the Council, describing some possible ways of complying with the minimum requirements contained in this Directive. Modifications and supplements to the vademecum shall be adopted in accordance with the procedure laid down in Article 17 of Directive 89/391/EEC.</p> <p>Article 12</p> <p>Final provisions</p> <p>(1) Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 31 December 1997. They shall forthwith inform the Commission thereof.</p> <p>When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by the Member States.</p>	<p>Article 11</p> <p>Vademecum</p> <p>A vademecum setting out guidelines for some possible ways of complying with the minimum requirements contained in this Directive shall be drawn up by the Commission in accordance with the procedure laid down under Article 17 of Directive 89/391/EEC, modifications and supplements shall be subject to the same procedure.</p> <p>Article 12 (new)</p> <p>Information to undertakings</p> <p>Member States shall ensure that the undertakings particularly medium and small sized enterprises, likely to be affected by this Directive, are timely informed of its provisions. In this context Member States shall also ensure that the vademecum drawn up pursuant to Article 11 is widely distributed.</p> <p>Article 13</p> <p>Final provisions</p> <p>(1) Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive not later than 31 December 1999. They shall forthwith inform the Commission thereof.</p> <p>unchanged</p>

Original Commission Proposal	Modified Proposal
(2) Member States shall communicate to the Commission the texts of the provisions of national law which they have already adopted or adopt in the field governed by this Directive.	unchanged
(3) Member States shall report to the Commission every five years on the practical implementation of the provisions of this Directive, indicating the points of view of employers and workers.	unchanged
The Commission shall inform the European Parliament, the Council, the Economic and Social Committee and the Advisory Committee on Safety, Hygiene and Health Protection at Work.	unchanged
Article 13	Article 14
This Directive is addressed to the Member States.	unchanged
Done at Brussels,	
For the Council	

Original Commission Proposal	Modified Proposal
<p>ANNEX I</p> <p>CLASSIFICATION OF PLACES WHERE EXPLOSIVE ATMOSPHERES MAY OCCUR</p> <p>1. Preliminary note</p> <p>The following system of classification shall be applied to places where, as a result of local and operational conditions, an explosive atmosphere may occur in such quantities as to require precautions to be taken in accordance with Articles 3 to 5 of this Directive.</p> <p>2. Places where explosive atmospheres may occur</p> <p>A place in which an explosive atmosphere may occur in such quantities as to require special precautions to protect the health and safety of the workers concerned shall be regarded as hazardous within the meaning of this Directive.</p> <p>A place in which an explosive atmosphere is not expected to occur in such quantities as to require special precautions shall be regarded as non-hazardous within the meaning of this Directive.</p> <p>Flammable substances shall be classified as materials which may form an explosive atmosphere unless an investigation of their properties has shown that in mixtures with air they are incapable of independently propagating an explosion.</p> <p>3. Classification of hazardous places</p> <p>Hazardous places shall be classified in terms of zones on the basis of the frequency and duration of the occurrence of an explosive atmosphere and the assessment of the anticipated effects.</p> <p>The extent of the measures to be taken in accordance with Annex II A is determined by this classification. The guide criteria for performance of work in the various zones (Annex IV) provide useful information which may be an aid to practical application.</p>	<p>ANNEX I</p> <p>unchanged</p> <p>1. Preliminary note</p> <p>The following system of classification shall be applied to places where precautions in accordance with Articles 3 to 5 of this Directive shall be taken.</p> <p>unchanged</p> <p>unchanged</p> <p>Flammable and/or combustible substances shall be considered as materials which may form an explosive atmosphere unless an investigation of their properties has shown that in mixtures with air they are incapable of independently propagating an explosion.</p> <p>3. Classification of hazardous places</p> <p>Hazardous places shall be classified in terms of zones on the basis of the frequency and duration of the occurrence of an explosive atmosphere.</p> <p>The extent of the measures to be taken in accordance with Annex II A is determined by this classification.</p>

Original Commission Proposal	Modified Proposal
<p>Zone 0</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.</p>	<p>Zone 0</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods or frequently.</p>
<p>Zone 1</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is likely to occur occasionally.</p>	<p>Zone 1</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is likely to occur in normal operation occasionally.</p>
<p>Zone 2</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur or, if it does occur, will persist for a short period only.</p>	<p>Zone 2</p> <p>A place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.</p>
<p>Zone 20</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, for long periods or frequently and in which deposits of combustible dust of unknown or excessive thickness may be formed. (Dust deposits alone are not grounds for classification as Zone 20).</p>	<p>Zone 20</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods or frequently.</p>
<p>Zone 21</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air can occasionally occur and in which deposits or layers of combustible dust can generally be present.</p>	<p>Zone 21</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is likely to occur in normal operation occasionally.</p>

Original Commission Proposal	Modified Proposal
<p>Zone 22</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur or in which accumulations or layers of combustible dust are present.</p>	<p>Zone 22</p> <p>A place in which an explosive atmosphere in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.</p> <p>Note I : Layers, deposits and heaps of combustible dust shall be considered as any other source which can form an explosive atmosphere.</p> <p>Note II : Normal operation means the situation when installations are used within their design parameters.</p>

Original Commission Proposal	Modified Proposal
<p>ANNEX II</p> <p>A. MINIMUM REQUIREMENTS FOR IMPROVING THE SAFETY AND HEALTH PROTECTION OF WORKERS POTENTIALLY AT RISK FROM EXPLOSIVE ATMOSPHERES</p> <p>PRELIMINARY NOTE</p> <p>The obligations laid down in this Annex apply</p> <ul style="list-style-type: none"> - whenever required by the features of workplaces, workstations, the equipment or substances used or the dangers caused by the activity in question as a result of explosive atmospheres, - to equipment in non-hazardous places which is required for, or helps to ensure, the safe operation of equipment located in hazardous places. <p>1. Organisational measures</p> <p>1.1 Competent workers</p> <p>For any workplace, there shall be available a sufficient number of workers with the requisite skills, experience and training to perform the explosion protection tasks assigned to them.</p> <p>1.2 Written instructions and permits to work</p> <p>Where required by the explosion protection document</p> <ul style="list-style-type: none"> - written instructions specifying the rules to be observed shall be issued for every workplace, taking into account the size of the operation and nature of activities, - a system of permits to work shall be applied for carrying out both hazardous activities and activities which may interact with other work to cause hazards. 	<p>ANNEX II</p> <p>A. MINIMUM REQUIREMENTS FOR IMPROVING THE SAFETY AND HEALTH PROTECTION OF WORKERS POTENTIALLY AT RISK FROM EXPLOSIVE ATMOSPHERES</p> <p>PRELIMINARY NOTE</p> <p>The obligations laid down in this Annex apply</p> <ul style="list-style-type: none"> - whenever required by the features of workplaces, workstations, the equipment or substances used or the dangers caused by the activity related to the risks from explosive atmospheres, <p>unchanged</p> <p>unchanged</p> <p>1.2 Written instructions and permits to work</p> <p>Work in places defined as hazardous in the explosion protection document shall be performed in accordance with written instructions to be established by the employer.</p> <p>A system of permits to work shall be established by the employer for carrying out both hazardous activities and activities which may interact with other work to cause hazards as defined in the explosion protection document.</p>

Original Commission Proposal	Modified Proposal
Permits to work shall be issued by a person with responsibility for this function prior to the commencement of work.	unchanged
1.3 Regular review of safety and health measures	
The employer shall ensure that the measures taken to protect the safety and health of the workers are reviewed regularly, at least once per year, to ensure compliance with this Directive.	unchanged
2. Assessment of explosion risks	
2.1 Any assessment of explosion risks shall be based on	unchanged
<ul style="list-style-type: none"> - the likelihood that explosive atmospheres will occur and their persistence, - the likelihood that ignition sources will be present and become effective, - the scale of the anticipated effects. 	
2.2 Ignitability shall be assessed by taking into account, in particular,	2.2 Ignitability shall be assessed by taking into account, in particular,
<ul style="list-style-type: none"> - the possible degree of dispersal of flammable substances, - the possible concentration of flammable substances in air within their explosion limits. 	<ul style="list-style-type: none"> - the degree of dispersion of flammable and/or combustible substances, - the concentration of flammable and/or combustible substances
2.3 Explosion risks shall be assessed overall.	2.3 Explosion risks shall be assessed overall.
The following are of particular importance:	The following are of particular importance:
<ul style="list-style-type: none"> - installations, - substances used, - processes, - possible interaction, including interaction with the working environment. 	<ul style="list-style-type: none"> - installations, - substances used, - processes, - and their possible interaction.
2.4 Working areas which are or can be connected via openings to places in which explosive atmospheres may occur shall be taken into account in assessing explosion risks.	2.4 Places which are or can be connected via openings to places in which explosive atmospheres may occur shall be taken into account in assessing explosion risks.

Original Commission Proposal	Modified Proposal
<p>3. Planning principles</p> <p>3.1 When planning new installations or the modification of existing ones, attention shall be paid, in particular, to</p> <ul style="list-style-type: none"> - normal operating conditions, including maintenance work, - constructional factors, - commissioning and decommissioning, - malfunctions, foreseeable fault conditions, - misuse which may reasonably be anticipated. <p>It shall also be ascertained as part of this process whether</p> <ul style="list-style-type: none"> - flammable substances can be replaced by others which cannot form explosive mixtures, - all types of connecting and coupling devices can be avoided in places in which explosive atmospheres may occur. <p>3.2 If the explosion protection document indicates that hazards to workers or the working environment cannot be ruled out, suitable measures and protective systems shall be introduced to combat such hazards.</p> <p>3.3 If the likelihood of an ignition source becoming effective cannot be assessed, the ignition source shall be regarded as being effective at all times, and protective measures selected accordingly.</p>	<p>3. Planning of installations</p> <p>unchanged</p> <p>It shall also be ascertained as part of this process whether</p> <ul style="list-style-type: none"> - flammable and/or combustible substances can be replaced by others which cannot form explosive mixtures, - all types of connections and couplings can be avoided in places in which explosive atmospheres may occur. <p>3.2 If hazards to workers are identified at the design stage, suitable provisions and protective systems shall be planned to combat such hazards.</p> <p>3.3 If the likelihood of an ignition source becoming effective cannot be assessed, the ignition source shall be regarded as being effective at all times.</p>
<p>4. Explosion protection measures</p> <p>4.1 If an explosive atmosphere contains several types of flammable gases, vapours, mists or dusts, protective measures shall be appropriate to the greatest potential hazard.</p> <p>4.2 Prevention of ignition hazards in accordance with Article 3 shall also take account of electrostatic discharges, where workers or the working environment act as the charge carrier or charge producer.</p>	<p>4.1 If an explosive atmosphere contains several types of flammable and/or combustible gases, vapours, mists or dusts, protective measures shall be appropriate to the greatest potential hazard.</p> <p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>4.3 Suitable precautions shall be taken to prevent propagation of explosions by dangerous chain reactions.</p>	<p>unchanged</p>
<p>4.4 Work equipment and associated connecting devices shall be so assembled that they do not give rise to an explosion hazard. They may be brought into service only if the explosion protection document shows that their operation will not involve an explosion hazard. This applies also to work equipment and associated connecting devices which are not regarded as equipment or protective systems within the meaning of Directive 94/9/EC on the approximation of the laws of the Member States⁶ concerning equipment and protective systems intended for use in potentially explosive atmospheres if their incorporation into an installation can in itself give rise to an ignition hazard. Suitable precautions shall be taken to prevent confusion between connecting devices.</p>	<p>unchanged</p>
<p>4.5 If the way in which portable appliances are used is such that they may be operated in places with different degrees of potential danger, appropriate organisational measures shall be taken to ensure safe operation; otherwise such appliances shall be selected on the basis of the most unfavourable conditions of use.</p>	<p>4.5 If portable appliances may be operated in places with different degrees of potential danger, appropriate organisational measures shall be taken to ensure safe operation; otherwise such appliances shall be selected on the basis of the most unfavourable conditions of use.</p>
<p>4.6 It shall be ensured that only those measuring instruments for recording explosive atmospheres are used which offer the reliability and accuracy appropriate to the actual conditions of use.</p>	<p>4.6 It shall be ensured that only those measuring instruments for detecting explosive atmospheres are used which offer the reliability and accuracy appropriate to the actual conditions of use.</p>
<p>4.7 Before explosion conditions are reached, it shall still be possible for the necessary explosion protection measures to be carried out in safety. Workers shall be given optical and/or acoustic warnings and, where necessary, withdrawn.</p>	<p>4.7 It shall be ensured that the necessary explosion protection measures can be carried out in safety before explosion conditions are reached. Workers shall be given optical and/or acoustic warnings and, where necessary, withdrawn before the explosion conditions are reached.</p>
<p>4.8 Protection systems providing explosion pressure relief shall safely divert the explosion pressure and any substances released.</p>	<p>unchanged</p>
<p>4.9 Any gases released which may give rise to explosion hazards shall be suitably evacuated.</p>	<p>unchanged</p>

⁶ OJ No L 100, 19.4.1994, p. 14

Original Commission Proposal	Modified Proposal
<p>4.10 Deposits of explosible dusts outside work equipment shall be removed or rendered harmless.</p>	<p>unchanged</p>
<p>4.11 Where additional risks may arise if the power supply to equipment and protective systems is interrupted, it shall be possible to maintain them in a safe state of operation independently of the rest of the installation.</p>	<p>4.11 Where equipment and protective systems can give rise to a spread of additional risks in the event of a power failure, it must be possible to maintain them in a safe state of operation independently of the rest of the installation.</p>
<p>4.12 Manual override shall be possible in order to shut down the equipment and protective systems incorporated within automatic processes which deviate from the intended operating conditions.</p>	<p>4.12 Manual override must be possible in order to shut down the equipment and protective systems incorporated within automatic processes which deviate from the intended operating conditions, provided that this does not compromise safety.</p>
<p>Only competent persons may take such action.</p>	<p>Only competent workers may take such action.</p>
<p>4.13 When the emergency shutdown is actuated, accumulated energy shall be dissipated or insulated as quickly and as safely as possible so that it no longer constitutes a hazard.</p>	<p>4.13 When the emergency shutdown system is actuated, accumulated energy must be disipated as quickly and as safely as possible or isolated so that it no longer constitutes a hazard.</p>
<p>This does not apply to electrochemically-stored energy.</p>	<p>This does not apply to electrochemically-stored energy.</p>
<p>4.14 Before a workplace containing places where explosive atmospheres may occur is used for the first time, its overall explosion safety shall be checked.</p>	<p>unchanged</p>
<p>The requisite conditions for ensuring explosion protection shall be maintained.</p>	<p>unchanged</p>
<p>4.15 Such checks shall be carried out by persons who possess particular expertise in the field of explosion protection as a result of their professional training, experience and current job.</p>	<p>4.15 Such checks shall be carried out by persons competent in the field of explosion protection as a result of their professional training, experience and current job.</p>
<p>Such persons shall be recognised and/or appointed for carrying out checks in a specific field in accordance with national legislation and/or practice.</p>	<p>deleted</p>

Original Commission Proposal	Modified Proposal
<p>B. CRITERIA FOR THE SELECTION OF WORK EQUIPMENT AND INSTALLATION MATERIALS</p> <p>If the explosion protection document based on a risk assessment does not state otherwise, work equipment and installation materials for all places in which explosive atmospheres may occur shall be selected on the basis of the categories set out in Parliament and Council Directive 94/9/EC on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres⁷.</p> <p>Zone 0</p> <p>In Zone 0, Category 1 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by mixtures of air and gases, vapours or mists are present continuously, for long periods or frequently.</p> <p>Zone 1</p> <p>In Zone 1, Category 2 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by gases, vapours or mists are likely to occur occasionally. Equipment suitable for use in Zone 0 may also be used.</p> <p>Zone 2</p> <p>In Zone 2, Category 3 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by gases, vapours or mists are unlikely to occur or, if they do, are likely to do so only infrequently and for a short period only. Equipment suitable for use in Zones 0 or 1 may also be used.</p> <p>Zone 20</p> <p>In Zone 20, Category 1 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by air/dust mixtures are present continuously, for long periods or frequently.</p>	<p>B. CRITERIA FOR THE SELECTION OF EQUIPMENT AND PROTECTIVE SYSTEMS</p> <p>If the explosion protection document based on a risk assessment does not state otherwise, equipment and protective systems for all places in which explosive atmospheres may occur shall be selected on the basis of the categories set out in Parliament and Council Directive 94/9/EC on the approximation of the laws of the Member States concerning equipment and protective systems intended for use in potentially explosive atmospheres.</p> <p>Zone 0</p> <p>In Zone 0, Category 1 equipment shall be used which is intended for use in places in which explosive atmospheres caused by mixtures of air and gases, vapours or mists are present continuously, for long periods or frequently.</p> <p>Zone 1</p> <p>In Zone 1, Category 2 equipment shall be used which is intended for use in places in which explosive atmospheres caused by gases, vapours or mists are likely to occur occasionally. Equipment suitable for use in Zone 0 may also be used.</p> <p>Zone 2</p> <p>In Zone 2, Category 3 equipment shall be used which is intended for use in places in which explosive atmospheres caused by gases, vapours or mists are unlikely to occur or, if they do, are likely to do so only infrequently and for a short period only. Equipment suitable for use in Zones 0 or 1 may also be used.</p> <p>Zone 20</p> <p>In Zone 20, Category 1 equipment shall be used which is intended for use in places in which explosive atmospheres caused by air/dust mixtures are present continuously, for long periods or frequently.</p>

⁷ OJ No L 100, 19.4.1994, p. 1

Original Commission Proposal	Modified Proposal
<p>Zone 21</p> <p>In Zone 21, Category 2 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by air/dust mixtures are likely to occur occasionally. Equipment suitable for use in Zone 20 may also be used.</p> <p>Zone 22</p> <p>In Zone 22, Category 3 equipment shall be used which is intended for use in areas in which explosive atmospheres caused by dust raised into the air are unlikely to occur or, if they do, are likely to do so only infrequently and for a short period only. Equipment suitable for use in Zones 20 or 21 may also be used.</p> <p>In accordance with Directive 89/655/EEC, the employer shall ensure that the equipment and installation materials used are suitable for the actual operating and service conditions. Where appropriate, this also applies to working clothes and personal protective equipment.</p>	<p>Zone 21</p> <p>In Zone 21, Category 2 equipment shall be used which is intended for use in places in which explosive atmospheres caused by air/dust mixtures are likely to occur occasionally. Equipment suitable for use in Zone 20 may also be used.</p> <p>Zone 22</p> <p>In Zone 22, Category 3 equipment shall be used which is intended for use in places in which explosive atmospheres caused by air/dust mixtures are unlikely to occur or, if they do, are likely to do so only infrequently and for a short period only. Equipment suitable for use in Zones 20 or 21 may also be used.</p> <p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>ANNEX III</p> <p>Warning sign for places where explosive atmospheres may occur, pursuant to Article 5 (3)</p> <div> </div> <p>Beware explosive atmospheres!</p> <p>- Distinctive features:</p> <ul style="list-style-type: none"> - triangular shape - black pictogram on a yellow background with black edging (the yellow part to take up at least 50% of the area of the sign). 	<p>ANNEX III</p> <p>Warning sign for places where explosive atmospheres may occur, pursuant to Article 5 (3)</p> <div> </div> <p>Place where explosive atmospheres may occur</p> <p>Distinctive features:</p> <ul style="list-style-type: none"> - triangular shape - black pictogram on a yellow background with black edging (the yellow part to take up at least 50% of the area of the sign).

Original Commission Proposal	Modified Proposal
<p>ANNEX IV</p> <p>GUIDE CRITERIA FOR PERFORMANCE OF WORK</p> <p>Installations are considered to be in normal operation when they are performing their intended function within their design parameters.</p>	<p>unchanged</p>
<p>Zone 0</p> <p>The presence of workers and performance of work are as a general rule not permissible.</p> <p>Ignition sources which may become effective during normal operation and even in infrequently occurring cases of malfunction must be avoided.</p>	<p>unchanged</p>
<p>Zone 1</p> <p>The performance of work during which ignition sources may occur during normal operation is permissible only if the precautions for this zone set out in the explosion protection document are applied.</p>	<p>unchanged</p>
<p>Ignition sources which may become effective during normal operation and in foreseeable cases of malfunction must be avoided.</p>	
<p>Zone 2</p> <p>The performance of work during which ignition sources may occur during normal operation is permissible only if the precautions for this zone set out in the explosion protection document are applied.</p> <p>Ignition sources which may become effective during normal operation must be avoided.</p>	<p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>Zone 20</p> <p>The presence of workers and performance of work are as a general rule not permissible.</p> <p>Ignition sources which may become effective during normal operation and even in infrequently occurring cases of malfunction must be avoided.</p>	<p>unchanged</p>
<p>Zone 21</p> <p>The performance of work during which ignition sources may occur during normal operation is permissible only if the precautions for this zone set out in the explosion protection document are applied.</p> <p>Ignition sources which may become effective during normal operation and in foreseeable cases of malfunction must be avoided.</p>	<p>unchanged</p>
<p>Zone 22</p> <p>The performance of work during which ignition sources may occur during normal operation is permissible only if the precautions for this zone set out in the explosion protection document are applied.</p> <p>Ignition sources which may become effective during normal operation must be avoided.</p>	<p>unchanged</p>

Original Commission Proposal	Modified Proposal
<p>ANNEX V</p> <p>NON-EXHAUSTIVE LIST OF SUBJECTS SUPPLEMENTING THE MINIMUM REQUIREMENTS OF THIS DIRECTIVE AND COVERED BY THE VADEMECUM REFERRED TO IN ARTICLE 9</p> <ul style="list-style-type: none"> - Layout and contents of the explosion protection document (see Article 4.3) - Organisational measures (see Annex II A, section 1) - Assessment of explosion risks (see Annex II A, section 2) - Planning principles (see Annex II A, section 3) - Explosion protection measures (see Annex II, section 4) - Instructions for the zoning of hazardous places (see Annex I) - Information on pertinent standards relating to work equipment 	<p>unchanged</p> <p>- Planning of installations (see Annex II A, section 3)</p> <p>unchanged up to end.</p>

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