Basic information

1992/0449C(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Directive	Procedure completed
Safety and health at work: exposure of workers to electromagnetic fields Repealed by 2011/0152(COD) Amended by 2007/0230(COD) Amended by 2012/0003(COD) **Subject** 4.15.15 Health and safety at work, occupational medicine	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
EMPL Employment and Social Affairs	PÉREZ ÁLVAREZ Manuel (PPE-DE)	26/07/1999

Council of the European Union

Council configuration	Meetings	Date
Employment, Social Policy, Health and Consumer Affairs	2535	2003-10-20
Employment, Social Policy, Health and Consumer Affairs	2512	2003-06-02
Employment, Social Policy, Health and Consumer Affairs	2454	2002-10-08
Agriculture and Fisheries	2555	2003-12-18

European Commission

Commission DG	Commissioner
Employment, Social Affairs and Inclusion	

Key events

Date	Event	Reference	Summary
23/12/1992	Legislative proposal published	COM(1992)0560	Summary
19/04/1993	Committee referral announced in Parliament, 1st reading		
29/03/1994	Vote in committee, 1st reading		Summary
19/04/1994	Debate in Parliament		
08/07/1994	Modified legislative proposal published	COM(1994)0284	Summary

01/09/1999	Vote in committee, 1st reading		
01/09/1999	Committee report tabled for plenary confirming Parliament's position	A5-0006/1999	
16/09/1999	Decision by Parliament, 1st reading	T5-0012/1999	Summary
08/10/2002	Debate in Council		Summary
02/06/2003	Debate in Council		Summary
18/12/2003	Council position published	13599/1/2003	Summary
15/01/2004	Committee referral announced in Parliament, 2nd reading		
18/03/2004	Vote in committee, 2nd reading		Summary
18/03/2004	Committee recommendation tabled for plenary, 2nd reading	A5-0196/2004	
29/03/2004	Debate in Parliament		
30/03/2004	Decision by Parliament, 2nd reading	T5-0213/2004	Summary
06/04/2004	Act approved by Council, 2nd reading		
29/04/2004	End of procedure in Parliament		
30/04/2004	Final act signed		
24/05/2004	Final act published in Official Journal		

Technical information

Procedure reference	1992/0449C(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Directive
Amendments and repeals	Repealed by 2011/0152(COD) Amended by 2007/0230(COD) Amended by 2012/0003(COD)
Legal basis	EC Treaty (after Amsterdam) EC 137-p2
Stage reached in procedure	Procedure completed
Committee dossier	EMPL/5/15410

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee report tabled for plenary, 1st reading/single reading		A3-0192/1994 OJ C 128 09.05.1994, p. 0009	29/03/1994	
Text adopted by Parliament, 1st reading/single reading		T3-0239/1994 OJ C 128 09.05.1994, p. 0128-0146	20/04/1994	Summary
Committee final report tabled for plenary, 1st reading /single reading		A5-0006/1999 OJ C 054 25.02.2000, p. 0010	01/09/1999	
Text adopted by Parliament confirming position adopted		T5-0012/1999		

at 1st reading		OJ C 054 25.02.2000, p. 0055-0075	16/09/1999	Summary
Committee recommendation tabled for plenary, 2nd reading		A5-0196/2004	18/03/2004	
Text adopted by Parliament, 2nd reading		T5-0213/2004 OJ C 103 29.04.2004, p. 0034-0222 E	30/03/2004	Summary

Council of the EU

Document type	Reference	Date	Summary
Council statement on its position	15620/2003	04/12/2003	
Council position	13599/1/2003 OJ C 066 16.03.2004, p. 0001-0013 E	18/12/2003	Summary

European Commission

Document type	Reference	Date	Summary
Legislative proposal	COM(1992)0560 OJ C 077 18.03.1993, p. 0012	23/12/1992	Summary
Modified legislative proposal	COM(1994)0284 OJ C 230 19.08.1994, p. 0003	08/07/1994	Summary
Reconsultation	SEC(1999)0581	28/04/1999	
Commission communication on Council's position	COM(2004)0014	12/01/2004	Summary
Commission opinion on Parliament's position at 2nd reading	COM(2004)0321	22/04/2004	Summary
Commission working document (SWD)	SWD(2017)0010	12/01/2017	Summary

Other institutions and bodies

Institution/body	Document type	Reference	Date	Summary
EESC	Economic and Social Committee: opinion, report	CES0716/1993 OJ C 249 13.09.1993, p. 0028	30/06/1993	Summary

Additional information

Source	Document	Date
European Commission	EUR-Lex	

Final act

Directive 2004/0040
OJ L 184 24.05.2004, p. 0001 Summary

Corrigendum to final act 32004L0040R(01)
OJ L 184 24.05.2004, p. 0001

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 12/01/2017

The Commission presented a working document accompanying the Commission communication to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on the modernisation of the EU occupational safety and health legislation and policy.

The detailed ex-post evaluation of the EU acquis, checking their relevance as well as efficiency, effectiveness, coherence and EU added value, carried out by the Commission confirms that the framework meets its ambition to adequately protect workers.

Main conclusions: the evaluation concluded that the overall structure of the EU occupational safety and health acquis, consisting of a goal-oriented Framework Directive complemented by specific Directives, is generally effective and fit-for-purpose.

However, it pointed to **specific provisions of individual Directives that have become outdated or obsolete**, and highlighted the need to find effective ways to **address new risks**.

The way in which Member States have transposed the EU occupational safety and health Directives varies considerably across Member States. Compliance costs therefore vary and cannot be easily dissociated from more detailed national requirements.

As regards SMEs: the evaluation clearly concluded that compliance with the occupational safety and health Directives is more challenging for SMEs than large establishments, while at the same time the **major and fatal injury rates are higher for SMEs**. Specific support measures are therefore necessary to **reach SMEs** and help them increase their compliance in an efficient and effective way.

Next steps: the evaluation considered that occupational safety and health measures should reach the widest number of people at work, **no matter the type of working relationship they are in, and no matter the size of company they work for**. Compliance with occupational safety and health rules should be manageable for businesses of all sizes and effectively monitored on the ground.

Measures must be result-oriented, instead of paper-driven, and maximum use should be made of **new digital tools** to facilitate implementation.

Characteristics of the evaluation: this exercise also forms part of the Commission's Regulatory Fitness (REFIT) Programme with a special focus on SMEs. In this respect, the evaluation concentrated both on Framework Directive 89/391/EEC and on the other 23 directives related to it.

The evaluation also concerned Directive 2004/40/EC of the European Parliament and of the Council on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (18th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)).

Given that this Directive has been repealed and replaced by the Directive 2013/35/EU, with a transposition deadline of 1 July 2016, **the review has been postponed**.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 20/04/1994 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted the report by Mr HUGHES on the exposure of workers to risks arising from physical agents.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 22/04/2004 - Commission opinion on Parliament's position at 2nd reading

The Commission states that it is able to accept all of the amendments adopted at Plenary. They concern in particular: - reference to the consultation and participation of workers; - content of the information and training which the worker and/or his representative must receive; - reinforce the provisions on health surveillance; - sanctions to be applicable in the event of infringement of national legislation; - transparency.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 23/12/1992 - Legislative proposal

PURPOSE : proposal to protect workers from the risks of exposure to physical agents.

PROPOSED ACT : Council Directive.

CONTENT : The proposal aims to protect workers against risks to their health and safety, including the prevention of such risks, arising or likely to arise from exposure to physical agents. It lays down particular minimum requirements in this area.

The physical agents are defined as:

-audible acoustic fields;

-vibrations;

-electric or magnetic fields or combinations of these with a frequency equal to or less than 3,10(15) Hertz (wavelength of 100 nanometres or more.)

The directive will apply to activities where workers are likely to be exposed to these physical agents as a result of their work. The employer must then carry out an assessment of the risks resulting from exposure. Under the conditions laid down in the relevant Annexes, certain activities must be considered as presenting an increased risk and must be declared to the authority responsible. Each physical agent must be assessed, and where necessary, measured. The risk arising from exposure must be reduced to the lowest achievable level, with the aim of reducing exposure to below the threshold level referred to in the relevant Annex.

The proposal proceeds on the basis that minimum requirements in the field must establish the general principles of protection and the objectives to be achieved, whilst leaving open the detailed rules translating the safety levels in operational terms, to be adopted in order to comply with the provisions of the Directive.

The proposal makes provisions on personal protection, as well as worker information and training, consultation and participation of workers.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 08/10/2002

The Council took note of information given by the Danish Presidency on the outcome of a technical seminar that it organised in Luxembourg on 20 September. The aim of this seminar was to establish whether there is enough scientific evidence of potential risks to the health and safety of workers when exposed to electromagnetic fields and waves to justify legislative measures. The seminar showed that there was agreement on a number of potentially acute health effects resulting from exposure to powerful, low-frequency electromagnetic field and waves, as well as to sources of radio and microwave frequencies. The Danish Presidency intends to continue work, in close co-operation with the forthcoming Greek Presidency and the Commission, on the preparation of a new text for a Directive on minimum requirements for safety and health regarding workers' exposure to electromagnetic fields and waves. This will follow the model of the two previous texts on vibration and noise (the former adopted in June 2002, the latter currently in conciliation with the European Parliament).

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 20/10/2003

The Council has reached a political agreement on the proposal for a Directive establishing minimum health and safety requirements regarding the exposure of workers to the risks arising from electromagnetic fields. The text adopted by the Council sets out maximum levels for exposure and also establishes levels at which preventative measures need to be taken by employers. Depending on the outcome of the risk assessment, employers may also be required to draw up an action plan to reduce levels and to put up warning signs in areas with excessive levels of electromagnetic field. Employers are also required to provide adequate information and training for workers that might be at risk. For workplaces open to the public, if an evaluation has already been made in line with Council Recommendation 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields, and this evaluation excludes safety risks, then the employer does not have to perform a new evaluation of the exposure levels. In an effort to combat accidents such as induced electric currents in the body, shocks and burns, and absorption of thermal energy produced by electromagnetic fields, the directive lays down new requirements on employers to carry out assessments of the risks posed to their employees from electro-magnetic fields. The directive, which will apply to electricity generation, radio and TV broadcasting antennae, mobile phone antennae, radar installations, or large furnaces of the type used in the metal industries, sets out issues that should be covered in this risk assessment, for example certain direct and indirect effects, such as interference with medical equipment such as pacemakers, or ignition of flammable objects. The proposal applies mainly to workers exposed to a high risk of irradiation, and will include those working in heavy industries such as steel or metallurgical treatment. Other workers affected include those working for long periods near TV and radio broadcasting installations, radar installations and mobile phone masts, and even cashiers exposed for long periods to anti-theft devices used in shops.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 12/01/2004 - Commission communication on Council's position

In its opinion on the Council's common position, the Commission states that it can accept the Council's text which was adopted by unanimity. Overall, the Council's common position follows the lines of the Commission's proposal, even though its structure differs as a result of the splitting of the

proposal. However, one major difference compared with the Commission's amended proposal lies in the watering down of the provisions on health surveillance. The Commission has expressed a reservation on this; it feels that the provisions are inadequate, as they take away the preventive aspect of health surveillance and do not entitle workers to a medical examination in the event of overexposure. The Commission regards this as unjustifiable in a directive specifically concerned with excessive exposure to electromagnetic fields, the main consequences of which are harmful effects on health. It is a fact that internal damage resulting from unrecognised overexposure can only be detected by a health professional through regular health surveillance. Furthermore, Article 8 of the common position (health surveillance) does not comply with the rules on legislative drafting, as it does not contain any additional obligation compared with Article 14 of the Framework Directive 89/391/EEC. In practice, the text of the common position merely copies the said Article 14, despite the fact that the proposed Directive is concerned with the specific risks of exposure to electromagnetic fields. The main differences between the amended proposal and the Council's common position are as follows: - the structure has been modified and the articles renumbered following the decision to replace a general directive on physical agents by four individual directives dealing separately with the four physical agents. The Commission has accepted this split, provided that the amended proposal remains on the Council's agenda until all physical agents have been covered and the Council gives a firm undertaking to continue its work until all the remaining parts of the proposal have been dealt with; - the definitions of exposure limit values and action values have been amended. The Commission accepts the new definitions, which emphasise the significance of these values; - the common position no longer includes threshold levels. The Commission agrees to this, as threshold levels are of no significance in respect of electromagnetic fields, since there are no established health effects below the exposure limit values; - there is a reference to harmonised European standards from the European Committee for Electrotechnical Standardisation (CENELEC) for the assessment, measurement and/or calculation of workers' exposure to electromagnetic fields. The Commission accepts this reference, which improves the implementation of the Directive by making it easier for employers (especially SMEs) to fulfil their obligations; - the common position makes provision for the possibility of not carrying out the assessment, measurement and/or calculation of exposure to electromagnetic fields in workplaces open to the public provided that an evaluation has already been undertaken in accordance with the provisions of Council Recommendation1999/519/EC. The Commission accepts this new provision, which avoids bureaucratic constraints and the duplicated assessment of exposure levels while ensuring health protection for workers, as the values laid down for the public are five times more severe than those set out in the common position; - the provisions on health surveillance have been significantly watered down; the common position merely refers to Articles 14 and 15 of Framework Directive 89/391/EEC. The Commission has a reservation concerning this aspect of the common position and has had a statement entered in the Council minutes regretting that the common position does not include those elements of the Commission's amended proposal, following two amendments of the European Parliament, that emphasise the preventive character of medical surveillance by giving workers the right to a medical examination in the event of overexposure and allowing additions to the undertaking's prevention system based on the findings; - the provisions on activities involving an increased risk which should be declared to the competent authorities have been deleted. The Commission accepts this deletion, as the risk assessment should in any event identify such cases; - the appended tables and provisions have been updated in relation to the latest ICNIRP recommendations on this subject. The Commission of course accepts this update, which is based on the latest scientific and technical developments.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 16/09/1999 - Text adopted by Parliament confirming position adopted at 1st reading

The European Parliament confirmed as its first reading in the context of the codecision procedure the text voted upon on 20.04.1994 concerning this proposal for a directive.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 30/03/2004 - Text adopted by Parliament, 2nd reading

The European Parliament adopted the report by Manuel **PÉREZ ÀLVAREZ** (EPP-ED, E) broadly approving the Council's common position subject to five amendments, which were substantially the same as those agreed by its committee.

Parliament emphasised the preventive nature of surveillance, and inserted certain clauses aimed at reinstating the right to a medical examination in the event of over-exposure and strengthening the prevention system set up by the directive. Parliament stipulated that, if health damage resulting from over-exposure was detected, the employer should carry out a reassessment of the risks and ensure that the doctor and/or the medical authority responsible for health surveillance had access to the results of the risk assessment. Individual workers should also be given access to their own personal health records where they so request.

Parliament also introduced a new article requiring Member States to provide for "effective, proportionate and dissuasive" sanctions if their laws governing this area are broken. In addition, the Commission should inform Parliament every five years of any steps needed in the light of new scientific knowledge, particularly in connection with exposure to static magnetic fields, for which the directive lays down no exposure limits.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 30/06/1993 - Economic and Social Committee: opinion, report

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 29/04/2004 - Final act

PURPOSE : to establish minimum health and safety requirements regarding the exposure of workers to the risks arising from electromagnetic fields.

LEGISLATIVE ACT : Directive 2004/40/EC of the European Parliament and of the Council on the on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (18th individual Directive within the meaning of Article 16, paragraph 1 of Directive 89/391/EEC).

(Corrigendum to Directive 2004/40/EC of the European Parliament and of the Council published in the Official Journal l 159 of 30 April 2004).

CONTEXT : owing to the splitting of the 1992 initial proposal on the exposure of workers to the risks arising from physical agents, this Directive concerns specifically the risks arising from exposure to electromagnetic fields. Other types of physical agents include mechanical vibrations – Directive 2002/44/EC (COD/1992/0449), noise – Directive 2003/10/EC (COD/1992/0449CA) (which the European Parliament and the Council have already adopted) and optical radiations (COD/1992/0449B) which is still being discussed).

This Directive, adopted unanimously and by written procedure, complements Directive 89/391/EEC on the health and safety of workers, laying down minimum requirements and allowing Member States to adopt more protective provisions.

CONTENT : firstly, this Directive refers to the risk to the health and safety of workers due to known short-term adverse effects in the human body caused by the circulation of induced currents and by energy absorption as well as by contact currents. It introduces measures protecting workers from the risks associated with electromagnetic fields (0 Hz to 300 GHz). However, the long-term effects, including possible carcinogenic effects due to exposure to time-varying electric, magnetic and electromagnetic fields for which there is no conclusive scientific evidence establishing a causal relationship, are not addressed in this Directive. Nor does it address the risks resulting from contact with live conductors.

These measures are intended not only to ensure the health and safety of each worker on an individual basis, but also to create a minimum basis of protection for all Community workers, thus giving Member States the option of maintaining or adopting more favourable provisions for the protection of workers, in particular the fixing of lower values for the action values or the exposure limit values for electromagnetic fields.

Principles : two types of values are introduced :

- Limit values : fixed for 7 frequency ranges with the intention of preventing adverse effects on different parts or functions of the human body, such as the cardiovascular and central nervous systems or whole-body heat stress and excessive localised heating of tissues;

- Action values : fixed for 13 different frequency ranges (including static magnetic fields). They are obtained from the exposure limit values according to the rationale used by the International Commission on Non-ionising Radiation Protection (ICNIRP) in its guidelines on limiting exposure to non-ionising radiation (ICNIRP 7/99).

Employer's obligations : this Directive lays down the following employer obligations:

1) determine the exposure and assess risks : assess and, if necessary, measure and/or calculate the levels of electromagnetic fields to which workers are exposed. Assessment, measurement and calculation may be carried out in accordance with the scientifically-based standards and guidelines and when relevant, by taking into account the emission levels provided by the manufacturers of the equipment when it is covered by the relevant Community Directives. If the action values are exceeded, the employer shall assess and, if necessary, calculate whether the exposure limit values are exceeded. The assessment, measurement and/or calculations need not be carried out in workplaces open to the public provided that an evaluation has already been undertaken in accordance with the provisions of Council Recommendation 1999/519/EC on the limitation of exposure of the general public to electromagnetic fields. The data obtained from the assessment, measurement and/or calculation of the level of exposure shall be preserved in a suitable form so as to permit consultation at a later stage.

2) avoid and reduce risks : if the action values are exceeded, the employer shall devise and implement an action plan comprising technical and/or organisational measures intended to prevent exposure exceeding the exposure limit values.

Employers shall also take into account other working methods that entail less exposure to electromagnetic fields; the choice of equipment emitting less electromagnetic fields; technical measures to reduce the emission of electromagnetic; appropriate maintenance programmes for work equipment, workplaces and workstation systems; the design and layout of workplaces and workstations; limitation of the duration and intensity of the exposure; the availability of adequate personal protection equipment.

Workplaces where workers could be exposed to electromagnetic fields exceeding the action values shall be indicated by appropriate signs limiting access.

If, despite the measures taken by the employer to comply with this Directive, the exposure limit values are exceeded, the employer shall take immediate action to reduce exposure below the exposure limit values.

3) inform and train workers : the employer shall ensure that workers who are exposed to risks from electromagnetic fields at work and/or their representatives receive any necessary information and training relating to the outcome of the risk assessment.

4) the consultation and participation of workers is considered as being of great importance and shall therefore take place in accordance with Directive 89/391/EEC.

As far as the issue of health surveillance is concerned, the Directive waters down provisions concerning this aspect which opposes the wishes expressed by the European Parliament and the Commission. These measurements, in conformity with those already envisaged by the Framework Directive, do not envisage specific measurements of prevention, nor of systematic diagnosis of the health of the exposed workers. In response to European Parliament amendments at second reading, the Directive provides for a medical examination of the workers subjected to an exposure exceeding the limit values and if it proves that their health has deteriorated as a result of this exposure, a reassessment of the risk shall be carried out

by the employer. In accordance with another of Parliament's wishes, measures are also designed to ensure that the doctor responsible for the health surveillance has the access to the results of the risk assessment while the workers concerned will be able to have access to their own personal medical records.

At Parliament's request, the Directive includes :

- a new article requiring Member States to provide for "effective, proportionate and dissuasive" sanctions if their laws governing this area are broken has been included;

- the use of the codecision procedure for all changes to the limit or action values;

- the presentation by the Commission of a report on the practical implementation of this Directive as well as an assessment of any developments in this field in particular as regards exposure to static magnetic fields.

ENTRY INTO FORCE : 30.04.2004.

TRANSPOSITION : 30.04.2008.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 02/06/2003

The Council took note of a written progress report from the Greek Presidency on the draft Directive on minimum requirements for safety and health in relation to workers' exposure to risks due to electromagnetic fields and waves. Considerable progress has been made on this dossier. However, certain issues of a technical nature remain outstanding, they concern: - the scope of the Directive and definitions (Articles 1 and 2); - exposure limit values and action values (Article 3); - assessment of risks (Articles 3 (º2) and 4); - applicability of preventive measures (Article 5); The Presidency expects these to be resolved at a forthcoming Council meeting.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 08/07/1994 - Modified legislative proposal

The Commission submits to the Council an amended proposal. There are two main types of amendments:

-one group of amendments provides useful additional detail and clarification of the initial proposal;

-a second group of amendments strengthen the proposal by enhancing the protection offered to the health and safety of workers.

The Commission’s amended proposal retains the general structure and objectives of the initial proposal but extends and expands on certain provisions. Of the 41 amendments adopted by Parliament, 31 have been accepted, 4 of these in part.

Six amendments have been rejected because they sought to exclude audible acoustic fields (Annex 1) from the scope of the proposal. The Commission has not accepted these amendments because they are contrary to the Commission’s obligations under Article 10 of Directive 86/188/EEC and under the European Parliament resolution of 13 September 1990 which requires the Commission to put forward a proposal on a directive on the basis of Article 118A of the Treaty with regard to the risks arising from noise and vibration and other physical agents.

The Commission has also refused an amendment which imposes upon it an obligation already fulfilled by the Commission in producing its annual report on the implementation of Community legislation.

Three amendments could not be accepted because their extremely binding nature would impose additional costs on employers yet not contribute to enhancing the health and safety of workers.

Safety and health at work: exposure of workers to electromagnetic fields

1992/0449C(COD) - 18/12/2003 - Council position

To recall, owing to the splitting of the 1992 initial proposal on the exposure of workers to the risks arising from physical agents, this common position concerns specifically the risks arising from exposure to electromagnetic fields. The Council considers that, as a whole, the common position is in line with the fundamental objectives of the Commission's amended proposal. The Council also considers that it has taken account of the principal objectives pursued by the European Parliament in its proposed amendments. The general structure of the common position, for instance the introduction of exposure limit values and action values, the articles on worker information and training, consultation and participation and the miscellaneous provisions, closely follows the provisions of the Directives on vibration and noise. This is also in line with the general structure of the Commission's amended proposal. The Common Position refers to risks to the health and safety of workers due to known short-term effects in the human body and explicitly excludes possible long-term effects. The common position is based on the introduction of exposure limit values and action values as defined in Article 2 and set out in the Tables in the Annex according to Article 3. These values are to a large extent based on the recommendations established by the International Commission on Non-Ionising Radiation Protection (ICNIRP). Table 1 of the Annex contains the exposure limit values fixed for 7 different frequency ranges with the intention of preventing adverse effects on different parts or functions of the human body, such as the cardiovascular and central nervous systems or whole-body heat stress and excessive localised heating of tissues. The exposure

limit values do not apply to static magnetic fields, as for the moment there is not enough scientific evidence about possible adverse health effects resulting from exposure to static magnetic fields. This means, for example, that there are no exposure limit values for the handling of magnetic resonance facilities in the medical sector. Nevertheless, the Council adopted a statement to the Minutes inviting the Commission to closely monitor developments in this area in order to include exposure limit values for static magnetic fields in the Directive at a later stage, when scientific findings make this possible. Table 2 of the Annex contains action values fixed for 13 different frequency ranges. The action values are obtained from the exposure limit values according to the rationale used by ICNIRP in its guidelines on limiting exposure to non-ionising radiation (ICNIRP 7/99). In contrast to the exposure limit values, the action values also apply to static magnetic fields in order to prevent dangers like the projectile risk from ferromagnetic objects in static magnetic fields. The common position does not cover long-term effects, including carcinogenic effects, which could arise as a result of exposure to electrical, magnetic and electromagnetic fields which vary in time, in respect of which there are as yet no scientific data which make it possible to establish a causal link. The common position lays down action values for static magnetic fields. However, like the Commission's proposal, and to the extent that current scientific knowledge is uncertain as to thehealth effects of exposure to such fields, the common position does not stipulate exposure limit values for static magnetic fields. In a statement entered in its minutes, the Council regretted that it was not able to address the health effects resulting from occupational exposure to static magnetic fields and invited the Commission to closely monitor developments at the ICNIRP in this area. The Commission replied to this statement by explaining that it will propose any updating that it considers necessary in the light of the evolution of scientific knowledge in this field. The common position describes the preventive measures needed to reduce the risks to which workers are exposed. These preventive measures are primarily based on the employer's obligation to identify and assess the various risks resulting from exposure to electromagnetic fields. One of the main elements in the common position is therefore the assessment of the levels of electromagnetic fields to which workers are exposed, which may require measurements and/or calculations. In this connection, the common position states that until harmonised European standards established by the European Committee for Electrotechnical Standardisation (CENELEC) cover all assessment, measurement and calculation situations, Member States may employ other scientifically-based standards or guidelines. On the basis of the risk assessment, and unless the assessment carried out demonstrates that the exposure limit values are not exceeded and safety risks can be excluded, the employer is required to devise and implement an action plan comprising technical and/or organisational measures intended to prevent exposure exceeding the limit values. The common position includes detailed provisions on information and training for workers exposed to risks from electromagnetic fields. It also imposes "appropriate health surveillance" for workers who might suffer adverse health or safety effects. Concerning the European Parliament's amendments, the common position accepts 13 of the 24 approved at first reading. Amongst the amendments rejected, some have been taken up in the Commission's amended proposal such as those concerning health surveillance. The main differences between the amended proposal and the Council's common position are as follows: - the structure has been modified and the articles renumbered following the decision to replace a general directive on physical agents by four individual directives dealing separately with the four physical agents; - the definitions of exposure limit values and action values have been amended; - the common position no longer includes threshold levels; - there is a reference to harmonised European standards from the European Committee for Electrotechnical Standardisation (CENELEC) for the assessment, measurement and/or calculation of workers' exposure to electromagnetic fields; - the common position makes provision for the possibility of not carrying out the assessment, measurement and/or calculation of exposure to electromagnetic fields in workplaces open to the public provided that an evaluation has already been undertaken in accordance with the provisions of Council Recommendation 1999/519/EC; - the provisions on health surveillance have been significantlywatered down; - the common position merely refers to Articles 14 and 15 of Framework Directive 89/391/EEC; - the provisions on activities involving an increased risk which should be declared to the competent authorities have been deleted; - the appended tables and provisions have been updated in the Annex in relation to the latest ICNIRP recommendations on this subject. It should be noted that the in the draft statements to be entered in the Council minutes, the Council regrets that it was not able to address in the present Directive the health effects resulting from occupational exposure to static magnetic fields due to the delay in the production of an updated review of the scientific evidence of health effects of static magnetic fields which would remove uncertainties in existing knowledge. The Greek delegation also states that by including neither specific measures nor any preventative elements, the Directive will be poorer.