

Proposal for a European Parliament and Council Directive on Energy efficiency requirements for ballasts for fluorescent lighting

(1999/C 274 E/03)

(Text with EEA relevance)

COM(1999) 296 final — 1999/0127(COD)

(Submitted by the Commission on 17 June 1999)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

a significant improvement of the energy efficiency of ballasts;

Having regard to the Treaty establishing the European Community and in particular Article 95 thereof,

(6) Whereas the adoption of such measures falls within Community competence; whereas the requirements of this Directive are within the limits of its objectives, thus conforming to the requirements of Article 5 of the Treaty;

Having regard to the proposal from the Commission,

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

(7) Whereas, moreover, Article 174 of the Treaty calls for the protection and improvement of the environment and prudent and rational utilisation of natural resources, these two objectives being among those of the Community policy on the environment; whereas electricity generation and consumption account for 30% of man-made carbon dioxides (CO₂) emissions and some 35 % of primary energy consumption in the Community, whereas these percentages are increasing;

Acting in accordance with the procedure laid down in Article 251 of the Treaty ⁽¹⁾,

- (1) Whereas it is important to promote measures aimed at the proper functioning of the internal market;
- (2) Whereas in its Resolution of 15 January 1985 on the improvement of energy-saving programmes in the Member States ⁽²⁾ the Council invited the Member States to pursue and, where necessary, increase their efforts to promote the more rational use of energy by the further development of integrated energy-saving policies;
- (3) Whereas fluorescent lighting accounts for a significant share of energy consumption in the Community and thus of total energy consumption; whereas the various models of ballasts for fluorescent lighting available on the Community market have very different levels of consumption for a given type of lamp, i.e. extremely variable energy efficiency;
- (4) Whereas some Member States appear to be on the point of adopting provisions relating to the efficiency of ballasts for fluorescent lighting, which might create barriers to trade in these products in the Community;
- (5) Whereas it is appropriate to take as a base a high level of protection in proposals for the approximation of the provisions laid down by law, regulation or administrative action in Member States concerning health, safety, environmental protection and consumer protection; whereas this Directive ensures a high level of protection for both the environment and the consumer, in aiming at

- (8) Whereas, furthermore, Council Decision 89/364/EEC of 5 June 1989 on a Community action programme for improving the efficiency of electricity use ⁽³⁾ has as its twin objectives to encourage consumers to favour appliances and equipment with high electrical efficiency and to improve the efficiency of appliances and equipment;
- (9) Whereas in its conclusions of 29 October 1990 the Council sets an objective of stabilising carbon dioxide (CO₂) emissions in the Community at 1990 levels by the year 2000; whereas the UNFCCC Protocol agreed in Kyoto on 10 December 1997 calls for a greenhouse gases emission reduction for the Community of 8 % by year 2012; whereas in order to achieve this objective stronger measures are required to limit and to reduce CO₂ emissions within the Community;
- (10) Whereas Decision 91/565/EEC ⁽⁴⁾ established a programme to promote energy efficiency in the Community (the SAVE programme); and Decision 96/737/EC ⁽⁵⁾ established a new multiannual programme (the SAVE II programme) to continue and strengthen the action of the original SAVE programme;
- (11) Whereas most energy-efficient ballasts are available at a different cost and they can pay for their initial cost through electricity savings within a few years; whereas

⁽¹⁾ Opinion of the European Parliament of 26 October 1995 (OJ C 308, 20.11.1995, p. 134), Council common position of 11 March 1996 (OJ C 120, 24.4.1996, p. 10) and Decision of the European Parliament of 18 June 1996 (OJ C 198, 8.7.1996).

⁽²⁾ OJ C 20, 22.1.1985, p. 1.

⁽³⁾ OJ L 157, 9.6.1989, p. 32.

⁽⁴⁾ OJ L 307, 8.11.1991, p. 34.

⁽⁵⁾ OJ L 335 of 24.12.1996, p. 50.

this calculation does not take into account the added benefit of the external costs of electricity generation thereby avoided, such as emissions of carbon dioxide (CO₂) and other pollutants;

- (12) Whereas this Directive, which is aimed at eliminating technical barriers with regard to improving the energy efficiency of ballasts for fluorescent lighting, must follow the 'new approach' established by the Council Resolution of 7 May 1985 on a new approach to technical harmonisation and standards ⁽¹⁾ which specifically lays down that legislative harmonisation is limited to the adoption, by means of directives, of the essential requirements with which products put on the market must conform;
- (13) Whereas Council Resolution of 19 June 1998 called for a programme of complementary common and coordinated measures, such as improved dynamic energy efficiency standards;
- (14) Whereas an effective enforcement system is necessary to ensure that the Directive is implemented properly, guarantees fair conditions of competition for producers and protects consumer rights;
- (15) Whereas regard should be given to the Council Decision 93/465/EEC of 22 July 1993 concerning the modules for the various phases of the conformity assessment procedures and the rules for the affixing and use of the CE conformity marking ⁽²⁾, which are intended to be used in the technical harmonisation directives;
- (16) Whereas in the interest of international trade, international standards should be used wherever appropriate; whereas the electricity consumption of a ballast is defined by the European Committee for Standardisation Standard EN 50294 of July 1998, which is based on international standards;
- (17) Whereas ballasts for fluorescent lighting complying with the energy efficiency requirements of this Directive must bear the 'CE' marking and associated information, in order to enable them to move freely;
- (18) Whereas this Directive is confined to ballasts for fluorescent lighting, supplied by mains electricity;
- (19) Whereas it did not prove possible to achieve the same objectives of the present proposal through a negotiated agreement with the European Association of ballast manufacturers: CELMA, due to the high level of imports into the Community market,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

This Directive shall apply to new electric mains-operated ballasts for fluorescent lighting sources as defined in Annex I and referred to hereafter as 'ballasts'.

However ballasts to be exported from the Community either as individual parts or as parts of luminaires shall be excluded.

Article 2

1. Member States shall take all necessary measures to ensure that ballasts covered by this Directive can be placed on the Community market and put into service only if the power consumption of the ballast in question is less than or equal to the maximum allowable power consumption value for its category as calculated according to the procedures defined in Annex I.

2. The manufacturer of a ballast covered by this Directive, its authorised representative established in the Community or the person responsible for placing the ballast on the Community market shall be responsible for ensuring that each ballast placed on the market conforms with the requirement referred to in paragraph 1.

Article 3

1. Member States may not prohibit, restrict or impede the placing on the market or the putting into service in their territory of ballasts which bear the 'CE' marking attesting to their conformity with all the provisions of this Directive.

2. Unless they have evidence to the contrary, Member States shall presume that ballasts bearing the 'CE' marking required under Article 5 comply with all the provisions of this Directive.

3. (a) Where ballasts are subject to other Directives covering other aspects which also provide for affixing of the 'CE' marking, the latter shall indicate that the ballasts in question are also presumed, unless evidence to the contrary exists, to conform to the provisions of those other Directives.

(b) However, where one or more of these Directives allows the manufacturer, during a transitional period, to choose which rules to apply, the 'CE' marking shall indicate conformity solely with the provisions of those Directives applied by the manufacturer. In this case, the reference numbers of the Directives applied, as published in the *Official Journal of the European Communities*, must be given in the documents, notices or instructions accompanying the ballasts.

⁽¹⁾ OJ C 136, 4.6.1985, p. 1.

⁽²⁾ OJ L 220, 30.8.1993, p. 23.

- (c) When ballasts are exported from the Community either as individual parts or as parts of luminaires this must be clearly indicated by manufacturer, its authorised representative established in the Community or the person responsible for placing the ballasts on the Community market in the documents, notices or instructions accompanying the ballasts.

Article 4

The conformity assessment procedures and the obligation relating to the 'CE' marking of ballasts are laid down in Annex II.

Article 5

1. When ballasts are placed on the market, they must bear the 'CE' marking, which shall consist of the initials 'CE'. The form of the marking to be used is shown in Annex III. The 'CE' marking shall be affixed visibly, legibly and indelibly to ballasts and, where appropriate, to the packaging.

2. The affixing on ballasts of any markings which are likely to mislead third parties as to the meaning and form of the 'CE' marking shall be prohibited. Any other marking may be affixed to the ballasts, their packaging, the instruction sheet or other documents, provided that the 'CE' marking remains clearly visible and legible.

Article 6

1. Where a Member State establishes that the 'CE' marking has been affixed improperly, the manufacturer or his authorised representative established within the Community shall be obliged to bring the product into conformity and to end the infringement in accordance with the conditions imposed by the Member State. Where neither the manufacturer nor his authorised representative is established within the Community, the person who places the ballasts on the Community market shall undertake these obligations.

2. Where the product continues not to be in conformity, the Member State shall take all necessary measures pursuant to Article 7 to restrict or prohibit the placing on the market of the product in question or to ensure that it is withdrawn from the market.

Article 7

1. Any decision taken pursuant to this Directive which contains a restriction on the placing on the market of ballasts shall state the precise grounds on which it is based. The party concerned shall be notified without delay of the decision and shall be informed at the same time of the possibilities and time limits regarding the legal remedies available to it under the laws in force in the Member State in question.

2. The Member State shall immediately inform the Commission of any such measure, indicating the reasons for its decision. The Commission shall make this information known to the other Member States.

Article 8

1. Member States shall adopt and publish the laws, regulations and administrative provisions necessary to comply with this Directive within a year of its adoption. They shall immediately inform the Commission thereof.

Member States shall apply these provisions on the expiration of a period of one year counting from the date of adoption of this Directive.

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 Member States.

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

3. During a one-year period following adoption of this Directive, Member States shall permit the placing on the market of ballasts which comply with the same conditions as those which were applied on their territory at the date of adoption of this Directive.

Article 9

1. After four years from the adoption of this Directive the second set of maximum allowable power consumption values as defined in Annex IA will become applicable.

2. Before the expiry of a period of four years from the adoption of this Directive, the Commission shall make an assessment of the results obtained as compared with those expected. With a view to advancing to a third stage in energy efficiency improvement, the Commission shall then consider, in consultation with the interested parties, the need to lay down a third set of maximum allowed power consumption levels for significantly improving the energy efficiency of ballasts. In this case, the power consumption and the date of its entry into force will be based on levels which can be economically and technically justified in the light of the circumstances at the time. Any other measure judged appropriate to improve energy efficiency of ballast shall also be considered.

Article 10

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Communities*.

Article 11

This Directive is addressed to the Member States.

ANNEX I

Methods for calculating the maximum allowable power consumption for a given ballast type and procedures for the verification of conformity therewith

The energy efficiency of the lamp-ballast circuit is determined by the total input power into the circuit. This is a function of the lamp power and of the type of ballast; for this reason, the maximum allowed power consumption of a given ballast is defined as the maximum ballast-lamp circuit power, with different levels for each lamp power and ballast type.

To calculate the maximum allowable consumption of a given ballast, it must therefore first be allocated to the appropriate category from the following list:

Category	Description
1	Ballast for linear lamp type
2	Ballast for compact 2 tubes lamp type
3	Ballast for compact 4 tubes flat lamp type
4	Ballast for compact 4 tubes lamp type
5	Ballast for compact 6 tubes lamp type
6	Ballast for compact 2 D lamp type

The maximum allowable power consumption expressed in W is defined by the following table:

Ballast Category	Lamp Power		Maximum Allowable Power Consumption
	50 Hz	HF	
1	15 W	13,5 W	≤ 25 W
	18 W	16 W	≤ 28 W
	30 W	24 W	≤ 40 W
	36 W	32 W	≤ 45 W
	38 W	32 W	≤ 47 W
	58 W	50 W	≤ 70 W
	70 W	60 W	≤ 83 W
2	18 W	16 W	≤ 28 W
	24 W	22 W	≤ 34 W
	36 W	32 W	≤ 45 W
3	18 W	16 W	≤ 28 W
	24 W	22 W	≤ 34 W
	36 W	32 W	≤ 45 W
4	10 W	9,5 W	≤ 18 W
	13 W	12,5 W	≤ 21 W
	18 W	16,5 W	≤ 28 W
	26 W	24 W	≤ 36 W
5	18 W	16 W	≤ 28 W
	26 W	24 W	≤ 36 W
6	10 W	9 W	≤ 18 W
	16 W	14 W	≤ 25 W
	21 W	19 W	≤ 31 W
	28 W	25 W	≤ 38 W
	38 W	34 W	≤ 47 W

Definitions

The terms used in this Annex correspond to the definitions in European Standard EN 50294 of July 1998 laid down by the European Committee for Standardisation.

ANNEX I A

The second set of maximum allowable power consumption which becomes applicable four years from the adoption

Ballast Category	Lamp Power		Maximum Allowable Power Consumption
	50 Hz	HF	
1	15 W	13,5 W	≤ 23 W
	18 W	16 W	≤ 26 W
	30 W	24 W	≤ 38 W
	36 W	32 W	≤ 43 W
	38 W	32 W	≤ 45 W
	58 W	50 W	≤ 67 W
	70 W	60 W	≤ 80 W
2	18 W	16 W	≤ 26 W
	24 W	22 W	≤ 32 W
	36 W	32 W	≤ 43 W
3	18 W	16 W	≤ 26 W
	24 W	22 W	≤ 32 W
	36 W	32 W	≤ 43 W
4	10 W	9,5 W	≤ 16 W
	13 W	12,5 W	≤ 19 W
	18 W	16,5 W	≤ 26 W
	26 W	24 W	≤ 34 W
5	18 W	16 W	≤ 26 W
	26 W	24 W	≤ 34 W
6	10 W	9 W	≤ 16 W
	16 W	14 W	≤ 23 W
	21 W	19 W	≤ 29 W
	28 W	25 W	≤ 36 W
	38 W	34 W	≤ 45 W
	55 W	55 W	

ANNEX II

Conformity Assessment Procedures (Module A)

1. This module describes the procedure whereby the manufacturer or his authorised representative established within the Community, who carries out the obligations laid down in point 2, ensures and declares that the ballast satisfies the relevant requirements of this Directive. The manufacturer shall affix the 'CE' marking to each ballast which he manufactures and draw up a written declaration of conformity.
2. The manufacturer must establish the technical documentation described in paragraph 3 and he or his authorised representative established within the Community shall keep it at the disposal of the relevant national authorities for inspection purposes, for a period of not less than three years from the date on which the last ballast has been manufactured.

Where neither the manufacturer nor his authorised representative is established within the Community, the obligation to keep the technical documentation available is the responsibility of the person who places the ballast on the Community market.

3. Technical documentation must enable the conformity of the ballast with the requirements of this Directive to be assessed. It must, as far as is relevant for such assessment, cover the design, manufacture and operation of the ballast and shall comprise:
 - i) the name and the address of the manufacturer;
 - ii) a general description of the model sufficient for unambiguous identification;
 - iii) information, including drawings as relevant, on the main design features of the model and in particular on items which appreciably affect its electricity consumption;
 - iv) the operating instructions, if any;
 - v) the results of power consumption measurements carried out as required by point 5;
 - vi) details of the conformity of these measurements as compared to the energy consumption requirements set out in Annex I.
4. Technical documentation established for other Community legislation may be used in so far as it meets the requirements of this Annex.
5. Manufacturers of ballast are responsible for establishing the power consumption of each ballast covered by this Directive according to the procedures specified in European Standard EN 50294, as well as the appliance's conformity with the requirements of Article 2.
6. The manufacturer or his authorised representative must keep a copy of the declaration of conformity with the technical documentation.
7. The manufacturer must take all measures necessary in order that the manufacturing process ensures that the manufactured ballasts comply with the technical documentation referred to in point 2 and with the relevant requirements of the Directive.

ANNEX III

'CE' Conformity Marking

The conformity marking shall consist of the initials 'CE' taking the following form:

If the 'CE' marking is reduced or enlarged the proportion given in the above graduated drawing must be respected.

The various components of the 'CE' marking must have substantially the same vertical dimension, which may not be less than 5 mm.