EUROPEAN COMMISSION

Brussels, 18 March 2015

Explanatory Memorandum accompanying

COMMISSION REGULATION (EU) No …/…

amending
Regulation (EC) No 244/2009 with regard to ecodesign requirements for non-directional household lamps
and
Regulation (EU) No 1194/2012 with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

Grounds for and objectives of the proposal

Non-directional household lamps, directional lamps, light emitting diode lamps, and related equipment (in the following described as 'lighting products') are widely used in the European Union for lighting purposes and contribute a significant share to the Union's energy consumption. Minimum energy efficiency requirements for this product group contribute to the fight against climate change and the increase of energy efficiency in the European Union.

The Ecodesign Directive 2009/125/EC[1] establishes a framework for setting ecodesign requirements for energy-related products such as lighting products. It is a key instrument of EU policy for improving the energy efficiency and other aspects of the environmental performance of products in the internal market. Lighting products are covered by Commission Regulation (EC) No 244/2009[2] of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps, and Commission Regulation (EU) No 1194/2012[3] of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode (LED) lamps and related equipment.

Technical, environmental and socio-economic analyses, including public consultations, ('review studies') legally required by Article 7 of Regulation 244/2009 have shown that:

(i) the adopted ecodesign requirements phasing out many mains voltage halogen lamps to come into force on 1 September 2016 ('stage 6') should be delayed by two years for an optimal impact, because suitable replacement options such as LED lamps will have matured further;

(ii) some luminaires currently placed on the market are not compatible with future energy efficient technologies covered under Regulation 244/2009 such as non-directional LEDs, creating a 'lock-in' effect to old technologies, an unnecessary obstacle to efficiency improvements, and negative economic impacts for the European user, and the compatibility requirements implemented in Regulation 1194/2012 should be amended and clarified to reduce the size of this problem; and

(iii) the definition of special purpose lamps should be updated to simplify market surveillance and reduce the misuse of special purpose lamps in general lighting applications while ensuring coherence between Regulation 244/2009 and

[1] OJ L 285, 31.10.2009, p. 10.
[2] OJ L 76, 24.3.2009, p. 3.
[3] OJ L 342, 14.12.2012, p. 1.

Regulation 1194/2012, simplifying compliance with the regulatory requirements for manufacturers and suppliers.

It is therefore proposed to revise Regulations 244/2009 and 1194/2012 and amend the definitions and ecodesign requirements according to the findings of the review studies.

General context

The total annual energy consumption of lighting products was estimated to be 340 TWh[4] (electrical energy consumption) in the European Union in 2011. This corresponds to CO_2 equivalent emissions of 120 Mt per year. The Commission issued technical, environmental, and economic analyses ('preparatory studies') to assess the potential to reduce energy consumption significantly below a business-as-usual scenario in a cost-effective way according to Article 15 of Directive 2009/125/EC, which showed that such potential exists. As a result, the Commission adopted the Ecodesign Regulations 244/2009, 245/2009, and 1194/2012 to regulate lighting products and improve their environmental performance.

Regulation 244/2009 establishes ecodesign requirements for the placing on the market of non-directional household lamps. All inefficient non-transparent (also known as pearl or frosted) lamps were phased out on 1 September 2009 by requiring them to be of an 'A'-class according to the EU lamp energy label Regulation[5]. Inefficient transparent lamps were phased out progressively, starting with the most power consuming conventional incandescent bulbs. From 1 September 2009, lamps equivalent in light output to 100W and above had to be at least of the energy efficiency class 'C'. By the end of 2012, the other wattage levels have followed and all transparent lamps now have to reach at least class 'C'. The last stage is due to come into force on 1 September 2016, further increasing minimum efficiency requirements to the energy efficiency class 'B' for transparent lamps.

Foreseeing that the original predictions on technological progress and the linked phase out stages might need to be adapted, Regulation 244/2009 provides for a review by 7 April 2014 especially taking account of the evolution of sales of special purpose lamp types so as to verify that they are not used for general lighting purposes, of the development of new technologies such as LEDs, and of the feasibility of establishing energy efficiency requirements at the 'A'-class level.

The Commission services conducted this review, including review studies by technical consultants, which revealed that improved incandescent lamps with mains voltage halogen technology currently available on the market, commonly known as halogen lamps, are only able to reach the energy efficiency class 'C'. These will therefore be phased out in 2016. While LED technology will likely be technically ready to replace halogen lamps, the review's findings suggest that a 2016 phase-out is not the optimal solution. Deferring the coming into

[4] According to the MEErP Methodology Study on the energy consumption by origin in the EU-27.

force of the last phase out stage by two years is on balance the best option. LED technology will still benefit from efficiency improvements after 1 September 2016 while retail prices continue decreasing. LEDs purchased in 2016 will not be replaced with more efficient ones for years to come due to their long life-time, slightly diminishing the overall savings potential of the LED technology.

Furthermore, some luminaires currently on sale are not compatible with efficient lighting technologies such as LEDs, creating a 'lock-in' effect to old technologies, which is an unnecessary obstacle to efficiency improvements and a burden to consumers. This might happen through design options limiting the dimensions of possible replacement lamps too much, or through the inclusion of functional elements such as control gear not compatible with LEDs. The review therefore suggests requiring future luminaire designs used in households to be compatible with energy efficient lighting solutions to minimise any negative economic impacts for the European user.

Apart from the timing of the last stage, the review also identified the definition of special purpose products exempt from ecodesign requirements to be inaccurate, hampering market surveillance activities and allowing the misuse of these products in general lighting applications. Accordingly, an update of the definition of special purpose products, coherent with Regulation 1194/2012 on directional lamps, is proposed.

The review on the feasibility to establish more stringent energy efficiency requirements equivalent to an 'A'-class level showed that it is too early for a decision on this matter, especially given the fast but not easily predictable development of LED and organic LED technologies. This feasibility should be examined in a more detailed study, incorporating a review of all three ecodesign Regulations and the energy labelling Regulation on lighting products.

Member States and stakeholders, including the industry and consumer organisations, have asked for an implementation of the aforementioned revisions through an amending Regulation.

Existing provisions in the area of the proposal

Existing legislation in fields of ecodesign and energy labelling includes:

- Commission Regulation (EC) No 244/2009[2] of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps;
- Commission Regulation (EC) No 245/2009[6] of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to

[5] Commission Delegated Regulation (EU) No 874/2012 of 12 July 2012 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of electrical lamps and luminaires, OJ L 258, 26.9.2012, p.1.

[6] OJ L 76, 24.3.2009, p. 17.

ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council;

- Commission Regulation (EU) No 1194/2012[3] of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, light emitting diode lamps and related equipment;
- Commission Delegated Regulation (EU) No 874/2012[5] of 12 July 2012 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of electrical lamps and luminaires;
- Directive 2009/125/EC[1] of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast); and
- Directive 2010/30/EU[7] of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.

Other legislation with relevance for lighting products includes:

- Directive 2002/96/EC[8] of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE);
- Directive 2011/65/EU[9] of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoSH);
- Directive 2006/95/EC[10] of the European Parliament and of the Council of 12 December 2006 on the harmonisation of the laws of Member States relating to electrical equipment designed for use within certain voltage limits; and
- Directive 2004/108/EC[11] of the European Parliament and of the Council of 15 December 2004 on the approximation of the laws of the Member States relating to electromagnetic compatibility and repealing Directive 89/336/EEC.

Consistency with other policies and objectives of the Union

The Ecodesign Directive 2009/125/EC is an important instrument for achieving the objective of 20% energy savings by 2020, and its implementation is one of the priorities in the Commission's Communication on Energy 2020. Furthermore, implementation of Directive 2009/125/EC will contribute to the EU's target of reducing greenhouse gases by at least 20%

[7] OJ L 153, 18.6.2010, p. 1.
[8] OJ L 37, 13.2.2003, p.24.
[9] OJ L 174, 1.7.2011, p. 88.
[10] OJ L 374, 27.12.2006, p. 10.
[11] OJ L 390, 31.12.2004, p. 24.

by 2020, or by 30% if there is an international agreement that commits other developed countries to comparable emissions reductions.

The implementing measures under Directive 2009/125/EC related to lighting products, i.e. Regulations 244/2009, 245/2009 and 1194/2012, will achieve energy savings of 102 TWh and 35.9 $MtCO_2$ equivalent by 2020. The proposed amendment will further support the EU's targets by optimising the phase out of inefficient lighting technologies, reducing the misuse of special purpose products in general household lighting, and preventing European consumers from the 'lock-in' effect of incompatible technologies, therefore decreasing the electricity consumption of lighting products and costs to European consumers compared to the current regulatory requirements.

Promotion of market take-up of efficient lighting products complies with the Europe 2020 agenda and its 20% energy savings target by the year 2020, as it aims to support more efficient and sustainable use of resources, protect the environment, strengthen EU's leadership in developing key-enabling environmental friendly technologies and improve the business environment through a level playing field for all manufacturers and suppliers.

The European Economic Recovery Plan (COM(2008) 800) mentions energy efficiency as one of the key priorities, in particular the promotion of the rapid take-up of products offering a 'high potential for energy savings', such as lighting products.

Finally, it will contribute to the objective of decoupling economic growth from the use of resources as set out in the Europe 2020 strategy (COM(2010) 2020) under the 'Resource-efficient Europe' flagship initiative.

2. CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

Consultation of interested parties

Consultation methods, main sectors targeted and general profile of respondents

International and EU stakeholders and Member State experts were consulted from the very beginning of the review studies, and the proposed amendment was discussed in the "Ecodesign Consultation Forum", which is established by Directive 2009/125/EC. The Consultation Forum is composed of experts of the Member States and a balanced representation of stakeholders, namely environmental and consumer NGOs, retailers and manufacturers. During the meeting of the Consultation Forum on 25 November 2013 the Commission services presented a working document suggesting a limited revision, based on the review's findings, of Regulations 244/2009 and 1194/2012. Incorporating the comments from Member States and stakeholders, the Commission services finalised the draft proposal here presented.

All relevant working documents and studies were circulated to the experts and stakeholders, and published in the Commission's CIRCABC system alongside the stakeholder comments

received in writing, which stakeholders asked us to make public. In addition, the initiative was discussed on different occasions at meetings of Commission staff with stakeholders and Member State representatives.

Summary of responses and how they have been taken into account

In general the amendment of Regulations 244/2009 and 1194/2012 is supported by stakeholders and Member States while incorporating diverse views.

The proposal of delaying the entry into force of the last stage of ecodesign requirements under Regulation 244/2009 by two years is a well-balanced compromise incorporating the diverse responses and is directly supported by some Member States and stakeholders. While a few stakeholders and Member States argued for a shorter or even no delay, a few others favoured a longer delay or even an abolishment of the relevant ecodesign requirements.

Amending and updating the definition of special purpose products in coherence with Regulation 1194/2012 gained the full support of Member States and stakeholders.

Improving the compatibility of requirements for luminaires with future energy efficient technologies, preventing a 'lock-in' effect to old technologies, was strongly supported by most Member States and stakeholders. Following the responses, our draft proposal to introduce these requirements was changed from 2015 to 2016.

Another proposal to include mains voltage halogen lamps with a G9 or R7s socket, which are currently exempt from the last stage requirements of Regulation 244/2009, received little support from Member States and stakeholders due to inconclusive market data, and was consequently dropped from the proposed amendment. This exemption will be further assessed in a future study.

International stakeholders

The proposed measure was notified to the WTO/TBT on 4 November 2014.

Collection and use of expertise

Scientific/expertise domains concerned

External expertise was gathered through the review studies providing technical, environmental and socio-economic analyses, which were carried out by a consortium of external consultants on behalf of the Commission’s Directorate-General for Energy. Three consultation meetings including stakeholders and Member State representatives were part of the review process.

Methodology used

The methodology followed the provisions of the Ecodesign Directive 2009/125/EC, in particular Article 15 and Annexes I and II. The technical, environmental and socio-economic

analyses followed partially the structure of the 'Methodology Study Ecodesign of Energy-using Products' devised for the Commission's Directorate-General for Enterprise and Industry and endorsed by stakeholders, amended to suit the review process.

Main organisations/experts consulted

The preparatory studies were conducted in an open process, taking into account input from stakeholders, including manufacturers, retailers and their associations, environmental NGOs, consumer organisations, EU/EEA Member State experts, and experts from third countries.

Summary of advice received and used

The technical, market and socio-economic analyses carried out for the review studies resulted in recommendations for amending Regulations 244/2009 and 1194/2012. These recommendations were used, in conjunction with the most recent available data from the industry, for suggesting a possible amendment of the aforementioned Regulations to the Consultation Forum. The comments of members of the Consultation Forum were then taken into account while drafting this proposed amendment.

No potentially serious risks with irreversible consequences were mentioned by any stakeholder, nor were any identified during the review process.

Means used to make the expert advice publicly available

The draft review studies were made publically available before each consultation meeting, and the final versions are made publicly available on CIRCABC and submitted to members of the Ecodesign Consultation Forum.

The written comments received, which stakeholders asked us to make public, and the minutes of the Consultation Forum meeting were made publicly available on CIRCABC.

Impact assessment

The proposal for an amending Regulation will not introduce new ecodesign requirements but correct existing ones. This proposal will therefore not generate any new impact, which has not previously been addressed in the Impact Assessments accompanying the adoption of Regulations 244/2009 and 1194/2012 in accordance with Article 15(4)(b) of Directive 2009/125/EC.

3. LEGAL ELEMENTS OF THE PROPOSAL

Summary of the proposed action

The scope of the proposed Regulation is to amend the Ecodesign Regulations 244/2009 and 1194/2012 to correct, clarify and update already existing regulatory requirements. It is

proposed to amend Article 2(4) and Article 3 of Regulation 244/2009 to correct and clarify the definition of special purpose products and the entry into force of the last-stage ecodesign requirements. It is proposed to amend Article 2(4), Article 2(28), Article 3(2), Annex I.2, Annex III.2.3, and Annex IV.3 of Regulation 1194/2012 to clarify the definition of special purpose products and the compatibility requirements of luminaires with energy efficient lighting technologies such as LEDs.

The amendment shall take immediate effect after the coming into force of the proposed Regulation.

Legal basis

The proposed Regulation is an implementing measure pursuant to Directive 2009/125/EC, in particular Article 15(1) thereof. The Directive is based on Article 114 of the Treaty.

Subsidiarity principle

The adoption of ecodesign measures for lighting products by individual Member States' legislation would lead to obstacles to the free movement of goods within the EU. Such measures must therefore have the same content throughout the EU. In line with the principle of subsidiarity, it is thus appropriate for the measure in question to be adopted at EU level.

Proportionality principle

In accordance with the principle of proportionality, this measure does not go beyond what is necessary to achieve the objective. It offers requirements which act as an incentive for technology leaders to invest in high-efficiency lighting products while reducing the economic costs for European consumers. It also leads to higher savings than any other conceivable option with minimum administrative costs.

Choice of instrument

Proposed instrument: Regulation.

Other means would not be appropriate for the following reason(s):

The proposed form of action is an amending Commission Regulation, because the objective of amending two Commission Regulations under Directive 2009/125/EC can only be achieved by fully harmonised requirements throughout the EU (including the date of entry into force), thus ensuring the free movement of complying lighting products. No costs arise for national administrations for transposition into national legislation.

4. BUDGETARY IMPLICATION

The proposal has no implications for the EU budget.

5. ADDITIONAL INFORMATION

Review/revision/sunset clause

The proposal includes no review clause, because the Commission Regulations to be amended already have review clauses, which remain unchanged.

European Economic Area

The proposed act concerns an EEA matter and should therefore extend to the European Economic Area.