Consultation Questionnaire Annex III Exemption 1(g)

„For general lighting purposes <30W *with a lifetime equal or above 20.000h: 3,5 mg*“

Abbreviations and Definitions

CFL	Compact fluorescent lamp
CFLi	Compact fluorescent lamp with integrated ballast
CFLni	Compact fluorescent lamp with non-integrated ballast
Hg	Mercury
LE	LightingEurope
LED	Light emitting diode

Background

The Oeko-Institut and Fraunhofer IZM have been appointed by the European Commission, within a framework contract[1], for the evaluation of applications for exemption from Directive 2011/65/EU (RoHS 2), to be listed in Annexes III and IV of the Directive. [1]

LightingEurope (LE) has submitted a request for the above mentioned exemption, which has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information, available on the request webpage of the stakeholder consultation (http://rohs.exemptions.oeko.info/index.php?id=278).

LightingEurope requests[2] the renewal of Ex. 1(g) of Annex III for CFL lamps (< 30 W) with a lifetime equal or above 20 000 h used for general lighting purposes. “*The use of long life lamps is directed to areas where lamp replacement is difficult and expensive due to high ceilings, special luminaire design for critical application requirements or too much disturbance of running processes during long operating hours. Also applications where safety of people is at stake e.g. heavy duty industry halls, chemical industry and oil platforms requiring very reliable long life specifications. Locations with long operating times of the lighting (24 hours a day) also prefer the CFL long life lamps*.”

According to LE (2016), one of the main characteristics of the lamps in this category is that they have a significantly higher lifetime compared to standard CFLs. As the consumption of mercury during lamp operation determines the lamp lifetime, a slightly higher amount of Hg is necessary for

[1] The contract is implemented through Framework Contract No. FWC ENV.A.2/FRA/2015/0008 of 27/03/2015, led by Oeko-Institut e.V.

[2] LE (2016), LightingEurope, Request to renew Exemption 1(g) under the RoHS Directive 2011/65/EU, submitted 28.6.2017, available under: http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_pack_13/Annex_1g/1g_LE_RoHS_Exemption_Req_Final.pdf

these lamps to provide higher service lives. It can be understood that most lamps covered by the exemption do not have an integrated ballast (i.e. are CFLni) and are used in luminaires with electronic control gears.

In relation to possible substitutes, the applicant[3] claims that "*Long-life LED lamps exist, but frequently these are not a direct replacement for existing CFLi versions because of differences in shape factor, light distribution, weight of the lamp. Regarding long-life, non-integrated CFLs, there is no single LED retrofit lamp available that addresses all the parameters of the original CFL in terms of Wattage, colour temperature, socket, lumen output and switching cycles, not even within a 10% tolerance range. Therefore, in the case of CFL-ni, no LED retrofit (substitute)exists. The situation is similar for long-life, integrated CFLs. Their LED retrofit equivalents are restricted to limited products of the portfolio that can address all the relevant parameters such as Wattage, colour temperature, socket and lumen output of CFLs, within a 10% tolerance range*."

For details, please check the applicant's exemption request at:
http://rohs.exemptions.oeko.info/index.php?id=278

The objective of this consultation and the review process is to collect and to evaluate information and evidence according to the criteria listed in Art. 5(1)(a) of Directive 2011/65/EU (RoHS II), which can be found under:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT

If you would like to contribute to the stakeholder consultation, please answer the following questions:

Questions

1. The applicant has requested the renewal of exemption 1(g), proposing to retain the existing wording formulation:
   "For general lighting purposes <30W with a lifetime equal or above 20.000h: 3,5 mg"
   a. Do you agree with the scope of the exemption as proposed by the applicant? Please explain your views both in relation to CFLi and to CFLni benefiting from this exemption.

   b. Available data shows that at least for long life CFLi (fixture E27) a wide variety of substitutes exists. For example, the German Eco-Top-Ten Product comparison[4] contains 154 LED lamps with an E27 socket and a service life between 20,000-40,000 hours. Additional sources show that a variety of substitutes are also available with higher service lives[5].

      i. Please explain if the exemption is still needed for certain types of CFLi or if CFLi could be excluded completely from the exemption scope.

[3] LE (2017), LightingEurope, Answers to 1st questionnaire regarding Annex III, Ex. No. 1(g) (renewal request), submitted, 15.9.2017, available under: http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_pack_13/Annex_1g/LE_WG_CE_-_TF_RoHS_-_1G_Questionnaire_Response_-_20170915_-_v5-_FINAL.pdf

[4] See: https://www.ecotopten.de/beleuchtung/led-lampen?field_10107_tid%5B0%5D=8383

[5] See for example https://www.longlife-led.de/led-lampen/led-retrofit-lampen.html?p=2; https://www.venturelighting.com/led-lighting/led-lamps/led-retrofit-lamps/; and http://assets.sylvania.com/assets/onlinemedia/ihdp/Lamp-and-Ballast-Catalog/#?page=42 (eg. pg. 42-45)

ii. If the exemption should remain available for some or all CFLi, please provide detailed specifications for CFLi lamps for which available alternatives are not compatible.

c. Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
d. Please explain why you either support the applicant's request or object to it. To support your views, please provide detailed technical argumentation / evidence in line with the criteria in Art. 5(1)(a).

2. Please provide information concerning possible substitutes or developments that may enable reduction, substitution or elimination, at present or in the future, of long life CFL;

   a. In this regard, please provide information as to alternatives that may cover part or all of the applicability range of long life CFL;

   b. Please provide quantitative data as to application specifications to support your view.

3. Please provide information as to research initiatives which are currently looking into the development of possible alternatives for some or all of the application range of *long life CFL*.

   a. Please explain what part of the application range is of relevance for such initiatives (in what applications substitution may be possible in the future).

   b. Please provide a roadmap of such on-going research (phases that are to be carried out), detailing the current status as well as the estimated time needed for further stages.

4. As part of the evaluation, socio-economic impacts shall also be compiled and evaluated. For this purpose, please provide details in respect of the following:

   a. The volume of EEE placed on the market annually in relation to exemption 1(g): please differentiate between CFLi and CFLni that are understood to fulfil the long life criteria specified in the exemption formulation.

   b. The amount of mercury to be avoided should the exemption not be granted - please differentiate between CFLi and CFLni;

   c. Estimations as to possible additional waste to be generated through a forced phase-out (if relevant) - please differentiate between CFLi and CFLni;

   d. Estimation of impacts on employment in total, in the EU and outside the EU, should the exemption not be granted. Please detail how possible impacts are distributed between different sectors, such as CFL manufacturers, LED manufacturers, supply chain, retail, etc.

e. Please estimate additional costs associated with a forced substitution should the exemption not be granted, and how this is divided between various sectors (e.g. private, public, industry: manufacturers, suppliers, retailers).

In case parts of your contribution are confidential, please provide your contribution in two versions (public /confidential). Please also note, however, that requested exemptions cannot be granted based on confidential information!

Finally, please do not forget to provide your contact details (Name, Organisation, e-mail and phone number) so that Oeko-Institut/Fraunhofer IZM can contact you in case there are questions concerning your contribution.