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**COMMISSION DELEGATED DIRECTIVE (EU) .../...**

**of **XXX****

**amending, for the purpose of adapting to technical and scientific progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for the use of mercury in non-linear tri-band phosphor lamps**

*This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission.*

## **EXPLANATORY MEMORANDUM**

### **1. CONTEXT OF THE DELEGATED ACT**

This Commission Delegated Directive amends, for the purpose of adapting to technical and scientific progress, Annex III to Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast)<sup>1</sup> (the RoHS Directive). The amendment concerns an exemption for specific applications containing mercury in non-linear tri-band phosphor lamps.

The RoHS Directive restricts the use of certain hazardous substances in electrical and electronic equipment (EEE), as specified in Article 4. Ten substances are currently restricted and listed in Annex II to the Directive: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), bis (2-ethylhexyl) phthalate (DEHP), butyl benzyl phthalate (BBP), dibutyl phthalate (DBP) and diisobutyl phthalate (DIBP). Annexes III and IV list EEE materials and components for specific applications that are exempt from the substance restrictions laid down in Article 4(1).

Article 5 of the Directive provides for adaptation of Annexes III and IV to scientific and technical progress, which can include granting, renewing or revoking exemptions. Pursuant to Article 5(1)(a), exemptions are to be included in Annexes III and IV only if this does not weaken the environmental and health protection afforded by Regulation (EC) No 1907/2006 (REACH)<sup>2</sup> and only if they meet any of the following conditions: (i) elimination or substituting the substance via design changes or materials and components which do not require any of the materials or substances listed in Annex II is scientifically or technically impracticable; (ii) the reliability of substitutes is not ensured; (iii) the total negative environmental, health and consumer safety impacts caused by substituting the substance are likely to outweigh the total environmental, health and consumer safety benefits thereof.

Decisions on exemptions, and their duration, must also take into account the availability of substitutes and the socioeconomic impact of substitution. Decisions on the duration of exemptions must take into account any potential impact on innovation. Life-cycle thinking on the overall impacts of the exemption must be applied, where relevant.

Article 5(1)(a) also specifies that, to include materials and components of EEE for specific applications listed in Annexes III and IV, the Commission must adopt individual delegated acts. Article 5(3) and Annex V describe the procedure for submitting exemption-related applications.

### **2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT**

The Commission received requests<sup>3</sup> from economic operators to grant or renew exemptions under Article 5(3) and Annex V to the RoHS Directive.

The current Annex III exemption 2(b)(3) permits the use of mercury in non-linear tri-band phosphor lamps with a tube diameter of > 17 mm (e.g. T9): 15 mg.

The Commission received two applications to renew this exemption in 2015. The applicants in essence claimed that substitutes for the applications covered by that exemption were not

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<sup>1</sup> OJ L 174, 1.7.2011, p. 88.

<sup>2</sup> OJ L 396, 30.12.2006, p. 1.

<sup>3</sup> The list is available at: [http://ec.europa.eu/environment/waste/rohs\\_eee/adaptation\\_en.htm](http://ec.europa.eu/environment/waste/rohs_eee/adaptation_en.htm).

available.<sup>4</sup> One of the applications was renewed in January 2020 with additional information, in particular as concerns the practicable mercury limit. In line with the requirements of the RoHS Directive (Article 5(5) (second subparagraph)), an exemption remains valid until the Commission takes a decision on the renewal application.

To evaluate the application to renew that exemption, the Commission launched a study<sup>5</sup> in June 2015, concluded in 2016, to carry out the required technical and scientific assessment, including an eight-week online stakeholder consultation.<sup>6</sup> Further to that study assessing the extensive technical and scientific data and contributions received, as documented in the study report, the Commission carried out in 2019<sup>7</sup> an update of the 2016 study, focused on the socioeconomic assessment and on the availability of substitutes of this and other exemptions. The final report of the study was published<sup>8</sup> and stakeholders were notified.

The Commission consulted the Member State expert group for delegated acts under the RoHS Directive during the expert meetings of 1 September 2016, 29 October 2018 and 21 October 2019 to collect the Member States' views on an envisaged course of action in line with the conclusions of the evaluations. It carried out all the requisite procedural steps relating to exemptions from the substance restriction under Articles 5(3) to 5(7).<sup>9</sup> The Council and the European Parliament were notified of all activities.

The final supporting study highlighted that:

- substitutes are available at system level (light-emitting diodes (LED) luminaires), but the range of substitutes at component level (replacement LED) and their compatibility with existing installations is yet to be verified in terms of dimensions and electric compatibility;
- more time is needed to develop sufficient compatible alternatives, hence the study recommended renewing the exemption for the maximum duration of three years;
- however, the reduction in mercury content limits is already technically possible.

In conclusion, the scientific and technical assessments, including stakeholder consultations, detailed that the exemption criteria continue to be met with regard to exemption 2(b)(3) as reliable substitutes are not yet available. The evaluation results also showed that the specific exemption would not weaken the environmental and health protection afforded by the REACH Regulation, in accordance with Article 5 of Directive 2011/65/EU.

### **3. LEGAL ELEMENTS OF THE DELEGATED ACT**

The delegated directive renews exemption 2(b)(3) listed in Annex III to Directive 2011/65/EU for the use of mercury in specified applications.

<sup>4</sup> [http://rohs.exemptions.oeko.info/fileadmin/user\\_upload/RoHS\\_Pack\\_9/Exemption\\_2\\_b\\_34\\_Lighting\\_Europe/2b3\\_LE\\_RoHS\\_Exemption\\_Req\\_Final.pdf](http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_Pack_9/Exemption_2_b_34_Lighting_Europe/2b3_LE_RoHS_Exemption_Req_Final.pdf) and [http://rohs.exemptions.oeko.info/fileadmin/user\\_upload/RoHS\\_Pack\\_9/Exemption\\_2\\_a\\_15\\_NARVA/01\\_02\\_a\\_2b3\\_4a.pdf](http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_Pack_9/Exemption_2_a_15_NARVA/01_02_a_2b3_4a.pdf).

<sup>5</sup> The final report of the study is available at <https://op.europa.eu/en/publication-detail/-/publication/a3fdcc8c-4273-11e6-af30-01aa75ed71a1>.

<sup>6</sup> Consultation period: 21 August 2015 to 16 October 2015, <http://rohs.exemptions.oeko.info>.

<sup>7</sup> [https://rohs.exemptions.oeko.info/fileadmin/user\\_upload/reports/FWCW\\_RoHS\\_Lamps\\_SEA\\_20190729\\_Final.pdf](https://rohs.exemptions.oeko.info/fileadmin/user_upload/reports/FWCW_RoHS_Lamps_SEA_20190729_Final.pdf)

<sup>8</sup> [https://ec.europa.eu/environment/waste/rohs\\_eee/studies\\_rohs1\\_en.htm](https://ec.europa.eu/environment/waste/rohs_eee/studies_rohs1_en.htm).

<sup>9</sup> A list of the required administrative steps is available on the [Commission website](#). The current stage of the procedure can be viewed for each draft delegated act in the Inter-institutional Registry of Delegated Acts at <https://webgate.ec.europa.eu/regdel/#/home>.

The Commission's assessment, based on the supporting studies and consultations, concluded that the exemption request meets at least one of the criteria laid down in Article 5(1)(a) of the RoHS Directive that justifies extending the exemption: the substitution of mercury with reliable substitutes in the lamp categories concerned by this exemption cannot currently be ensured.

In summary, the conditions for the exemption are fulfilled, and exemption 2(b)(3) is to be renewed. The assessment also concluded that the mercury concentration limit in the lamp categories covered by that exemption can be lowered from 15 mg to 10 mg per lamp.

The expiry date for this exemption is set in line with Article 5(2)(first subparagraph). As concluded by the evaluation, the state of development of substitutes justifies renewing the exemption for three more years. The validity period is not expected to have an adverse impact on innovation.

The legal instrument is a delegated directive, which is in line with the enabling legal act, Directive 2011/65/EU, in particular with the delegation set out in Article 5(1) and 20 thereof.

The objective of the delegated directive is to contribute to the protection of human health and the environment and to align the provisions for the functioning of the internal market in the field of electrical and electronic equipment, by allowing the use of otherwise banned substances for specific applications, with the provisions and under the conditions of the RoHS Directive and the procedure for adapting Annexes III and IV to scientific and technical progress.

The delegated directive has no implications on the EU budget.

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THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2011/65/EU 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<sup>1</sup>, and in particular Article 5(1), point (a), thereof,

Whereas:

- (1) Directive 2011/65/EU requires Member States to ensure that electrical and electronic equipment placed on the market does not contain the hazardous substances listed in Annex II to that Directive. That restriction does not apply to certain exempted applications listed in Annex III to that Directive.
- (2) The categories of electrical and electronic equipment to which Directive 2011/65/EU applies are listed in Annex I to that Directive.
- (3) Mercury is a restricted substance listed in Annex II to Directive 2011/65/EU.
- (4) By Decision 2010/571/EU<sup>2</sup>, the Commission granted, among other things, an exemption for the use of mercury in non-linear tri-band phosphor lamps with tube diameter > 17 mm (e.g. T9) ('the exemption'), which is now listed as exemption 2(b)(3) in Annex III to Directive 2011/65. The exemption was to expire on 21 July 2016, in accordance with Article 5(2), second subparagraph, point (a), of that Directive.
- (5) Mercury is used in non-linear tri-band phosphor lamps to produce ultraviolet light, which is then converted into visible light by the fluorescent coating on the lamp. The composition of the coating, which contains the mercury, determines light colour and colour rendering.
- (6) On 19 December 2014 and 15 January 2015, the Commission received two applications for renewal of the exemption ('the renewal application'), that is within the time limit laid down in Article 5(5) of Directive 2011/65/EU, one of which was with a renewed application on 20 January 2020.. In accordance with Article 5(5) of Directive 2011/65/EU, an exemption remains valid until a decision on the renewal request has been taken.

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<sup>1</sup> OJ L 174, 1.7.2011, p. 88.

<sup>2</sup> Commission Decision 2010/571/EU of 24 September 2010 amending, for the purposes of adapting to scientific and technical progress, the Annex to Directive 2002/95/EC of the European Parliament and of the Council as regards exemptions for applications containing lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers (OJ L 251, 25.9.2010, p. 28).

- (7) The evaluation of the renewal application, which took into account the availability of substitutes and the socioeconomic impact of substitution, concluded that the substitution or elimination of mercury in the applications concerned is currently technically impracticable. That evaluation further concluded that the mercury concentration limit in the lamp categories covered by that exemption can be lowered from 15 mg to 10 mg per lamp. The evaluation included stakeholder consultations in accordance with Article 5(7) of Directive 2011/65/EU. The comments received during those consultations were made publicly available on a dedicated website.
- (8) The exemption is consistent with Regulation (EC) No 1907/2006 of the European Parliament and of the Council<sup>3</sup> and thus does not weaken the environmental and health protection afforded by it.
- (9) It is therefore appropriate to grant the renewal of the exemption, with a revised wording setting out the limited scope of the exemption, for a period of three years, in accordance with Article 5(2), first subparagraph, of Directive 2011/65/EU, to collect further data related to the availability of substitutes for the specific lamp types covered by that exemption. In view of the results of the ongoing efforts to find a reliable substitution, the duration of the exemption is unlikely to have adverse impacts on innovation.
- (10) Directive 2011/65/EU should therefore be amended accordingly,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

Annex III to Directive 2011/65/EU is amended as set out in the Annex to this Directive.

*Article 2*

1. Member States shall adopt and publish, by [\[the last day of the sixth month after the date of entry into force of this Directive\]](#) at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith communicate to the Commission the text of those provisions.  
They shall apply those provisions from [\[the last day of the sixth month after the date of entry into force of this Directive + 1 day\]](#).  
When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

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<sup>3</sup> Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1).

*Article 3*

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

*Article 4*

This Directive is addressed to the Member States.

Done at Brussels,

*For the Commission*  
*The President*  
*Ursula VON DER LEYEN*

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