



**COUNCIL OF  
THE EUROPEAN UNION**

**Brussels, 6 November 2013  
(OR. en)**

**15731/13**

**ENV 1010  
MI 960  
DELECT 72**

**COVER NOTE**

---

From: Secretary-General of the European Commission,  
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 18 October 2013

To: Mr Uwe CORSEPIUS, Secretary-General of the Council of the European  
Union

---

No. Cion doc.: C(2013) 6814 final

---

Subject: COMMISSION DELEGATED DIRECTIVE ../.../EU of 18.10.2013  
amending, for the purposes of adapting to technical progress, the Annex IV  
to Directive 2011/65/EU of the European Parliament and of the Council as  
regards an exemption for hexavalent chromium in alkali dispensers used to  
create photocathodes in X-ray image intensifiers until 31 December 2019  
and in spare parts for X-ray systems placed on the EU market before 1  
January 2020

---

Delegations will find attached document C(2013) 6814 final.

---

Encl.: C(2013) 6814 final



Brussels, 18.10.2013  
C(2013) 6814 final

**COMMISSION DELEGATED DIRECTIVE ..../.../EU**

**of 18.10.2013**

**amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020**

(Text with EEA relevance)

## EXPLANATORY MEMORANDUM

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

Subject: Commission Delegated Directive amending, for the purposes of adapting to technical progress, Annex IV of the Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for applications containing hexavalent chromium.

Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 (RoHS 2) restricts the use of certain hazardous substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers) in electrical and electronic equipment. RoHS 2 (recast) entered into force on 21 July 2011.

RoHS 2 Annexes III and IV list exemptions of materials and components from the RoHS 2 substance restrictions. Article 5 provides for the adaptation (inclusion and deletion of exemptions) of the Annexes to scientific and technical progress. Pursuant to Article 5, exemptions shall be included in Annexes III and IV, provided that such inclusion does not weaken the environmental and health protection afforded by Regulation (EC) No 1907/2006 and where any of the following conditions is fulfilled: their elimination or substitution 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; the reliability of substitutes is not ensured; or the total negative environmental, health and consumer safety impacts caused by substitution are likely to outweigh the total environmental, health and consumer safety benefits thereof.

RoHS 2 Article 5 establishes a procedure for the adaption of the Annexes to scientific and technical progress. RoHS 2 Article 5(1)(a) provides that the Commission shall include materials and components of EEE for specific applications in the lists in Annexes III and IV by means of individual delegated acts.

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

In line with the provisions for granting, renewing or revoking an exemption, which allow stakeholders to apply for an exemption from the substance restrictions (Article 5(3)), the Commission has received more than 30 requests for new exemptions since the publication of RoHS 2. With a view to the evaluation of the requested exemptions, the Commission commissioned a study and carried out the requisite technical and scientific assessment including an official stakeholder consultation.<sup>1</sup> The final study is available on the consultants' webpage; stakeholders and Member States were notified.<sup>2</sup> The project page is accessible via the DG Environment webpage.

Subsequently, the Commission consulted the official expert group for delegated acts under RoHS 2. A meeting with consultants and experts was held on 8 February 2013, and experts

---

<sup>1</sup> The consultation list is regularly updated and maintained by the consultants in cooperation with the Commission, and includes electronics related industry organisations, manufacturers and suppliers, recyclers, consumer associations, NGOs, academia, Member States' representatives etc.

<sup>2</sup>

[http://rohs.exemptions.oeko.info/fileadmin/user\\_upload/RoHS\\_VI/20130412\\_RoHS2\\_Evaluati on Proj2\\_Pack1\\_ Ex\\_Requests\\_1-11\\_Final.pdf](http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_VI/20130412_RoHS2_Evaluati on Proj2_Pack1_ Ex_Requests_1-11_Final.pdf).

were invited to comment on the proposal by 24 March 2013. The expert group unanimously supported the proposal. All necessary steps pursuant to Article 5(3) to (7) have been performed. Council and Parliament were notified of all activities.

With respect to the inclusion of an exemption for "hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019, and in spare parts for X-ray systems placed on the EU market before 1 Jan 2020" the evaluation results show that the relevant criteria specified in Article 5(1)(a) are fulfilled and the inclusion of the specific application in the exemptions listed in Annex IV is justified. The exemption does not weaken the environmental and health protection afforded by Regulation (EC) No 1907/2006.

Image intensifiers use a component known as a photocathode which converts visible light (from an input phosphor) into electrons. In the fabrication process of such photocathodes there is currently no viable possibility to avoid the use of hexavalent chromium (CrVI) in all cases. Substitutes and alternative technologies are not sufficiently reliable or available to cover the full product demand range. There are still technical difficulties to be solved.

Some of the CrVI from the fabrication process of photocathodes remains inside the product that is placed on the market.

However, if the current technical issues can be resolved, a complete phase-out of the technology using CrVI is due as image intensifiers will probably no longer be used in new x-ray imaging systems. Image intensifiers will continue to be used as replacement spare parts in systems placed on the EU market before the expiry date of the exemption. As research cannot guarantee results 2020 is a realistic date for expiry of the exemption.

The exemption is justified according to article 5(1)(a) criteria. Regarding spare parts, the exemption is in line with Article 4(4)(f).

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

The proposed act grants an exemption from the substance restrictions in Annex II of Directive 2011/65/EU (RoHS 2), to be listed in Annex IV, for the use of hexavalent chromium in specific applications.

The proposed instrument is a delegated directive.

The draft delegated directive implements Directive 2011/65/EU, and in particular Article 5(1)(a) thereof.

The objective of the proposed act is to ensure legal certainty and sustainable market conditions for electronic manufacturers, by allowing specific applications of otherwise banned substances in line with the provisions of RoHS 2 and the therein established procedure for the adaption of the Annexes to scientific and technical progress.

In accordance with the principle of proportionality, the measure does not go beyond what is necessary to achieve its objective.

The proposal has no implications for the EU budget.

COMMISSION DELEGATED DIRECTIVE ../.../EU

of 18.10.2013

**amending, for the purposes of adapting to technical progress, the Annex IV to Directive 2011/65/EU of the European Parliament and of the Council as regards an exemption for hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020**

(Text with EEA relevance)

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>3</sup> and in particular Article 5(1)(a) thereof,

Whereas:

- (1) Directive 2011/65/EU prohibits the use of hexavalent chromium in electrical and electronic equipment placed on the market.
- (2) Hexavalent chromium is used in alkali dispensers that are used in order to create photocathodes in X-ray image intensifiers. Elimination or substitution of hexavalent chromium in the fabrication process of photocathodes is not possible as at present substitutes and alternative technologies are not sufficiently reliable or available to cover the full product demand range.
- (3) Some of the hexavalent chromium from the fabrication process of photocathodes inevitably remains inside the product that is placed on the market.
- (4) Directive 2011/65/EU should therefore be amended accordingly,

HAS ADOPTED THIS DIRECTIVE:

*Article 1*

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

---

<sup>3</sup> OJ L 174, 1.7.2011, p. 88.

## *Article 2*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by the last day of the sixth month after entry into force at the latest. They shall forthwith communicate to the Commission the text of those provisions.

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.

## *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, 18.10.2013

*For the Commission*  
*The President*  
*José Manuel BARROSO*

## ANNEX

In Annex IV to Directive 2011/65/EU the following point 30 is added:

"30. Hexavalent chromium in alkali dispensers used to create photocathodes in X-ray image intensifiers until 31 December 2019 and in spare parts for X-ray systems placed on the EU market before 1 January 2020."