



**COUNCIL OF
THE EUROPEAN UNION**

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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) 6832 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 lead in solders on printed circuit boards of
detectors and data acquisition units for Positron Emission Tomographs
which are integrated into Magnetic Resonance Imaging equipment

Delegations will find attached document C(2013) 6832 final.

Encl.: C(2013) 6832 final



Brussels, 18.10.2013
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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 lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment

(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 lead.

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 adaptation 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.¹ The final study is available on the consultants' webpage; stakeholders and Member States were notified.² 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

¹ 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.

²

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 "lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment", 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 major aspects are that:

- Strong vibrations occur in Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging. Research has shown that lead-free solders that have been investigated for vibration susceptibility are more vulnerable to early failure under the severe vibration conditions than bonds made with tin/lead solder.
- The specific conditions and geometrical restrictions of the equipment restrict the applicability of mechanical measures that could eliminate or sufficiently mitigate the effects of the intense vibration.

Substitution or elimination of lead is currently scientifically and technically impracticable. This exemption allows manufacturers sufficient time for research to identify suitable lead-free materials and designs.

The exemption does not weaken the environmental and health protection afforded by Regulation (EC) No 1907/2006.

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 lead 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

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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 lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment

(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,³ and in particular Article 5(1)(a) thereof,

Whereas:

- (1) Directive 2011/65/EU prohibits the use of lead in electrical and electronic equipment placed on the market.
- (2) Strong vibrations occur in Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging. Research has shown that lead-free solders that have been investigated for vibration susceptibility are more vulnerable to early failure under the severe vibration conditions than bonds made with tin/lead solder. The specific conditions and geometrical restrictions of the equipment restrict the applicability of mechanical measures that could eliminate or sufficiently mitigate the effects of the intense vibration.
- (3) Substitution or elimination of lead is currently scientifically and technically impracticable. A temporary exemption is needed to allow manufacturers sufficient time for research to identify suitable lead-free materials and designs.
- (4) Directive 2011/65/EU should therefore be amended accordingly,

³ OJ L 174, 1.7.2011, p. 88.

HAS ADOPTED THIS DIRECTIVE:

Article 1

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

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 32 is added:

"32. Lead in solders on printed circuit boards of detectors and data acquisition units for Positron Emission Tomographs which are integrated into Magnetic Resonance Imaging equipment. Expires on 31 December 2019."