

## **Assistance to the Commission on technological, socio-economic and cost-benefit assessment related to exemptions from the substance restrictions in electrical and electronic equipment (RoHS Directive)**

### Project Description

**Öko-Institut e.V. - Institute for Applied Ecology, Germany** (Project Management, Partner)

Carl-Otto Gensch

Yifaat Baron

Markus Blepp

**Fraunhofer Institute for Reliability and Microintegration IZM** (Partner)

Dr. Otmar Deubzer

**Eunomia Research & Consulting** (Peer Review - Leading Partner)

Dominic Hogg

**Öko-Institut e.V.**

**Freiburg Head Office**

P.O. Box 17 71  
79017 Freiburg, Germany

**Street Address**

Merzhauser Str. 173  
79100 Freiburg

**Phone** +49 (0) 761 – 4 52 95-0

**Fax** +49 (0) 761 – 4 52 95-288

**Darmstadt Office**

Rheinstr. 95  
64295 Darmstadt, Germany  
**Phone** +49 (0) 6151 – 81 91-0  
**Fax** +49 (0) 6151 – 81 91-133

**Berlin Office**

Schicklerstr. 5-7  
10179 Berlin, Germany  
**Phone** +49 (0) 30 – 40 50 85-0  
**Fax** +49 (0) 30 – 40 50 85-388

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## 1 Background

The RoHS Directive (2002/95/EC) (RoHS 1) has been recasted and has now become Directive 2011/65/EU that entered into force on 21 July 2011, repealing Directive 2002/95/EC on 3 January 2013. The RoHS Directive (2011/65/EU) on the restriction of the use of certain hazardous substances in electrical and electronic equipment requires “that EEE placed on the market, including cables and spare parts for its repair, its reuse, updating of its functionalities or upgrading of its capacity, does not contain the substances listed in Annex II” (i.e. lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers). These provisions “shall not apply to the applications listed in Annexes III and IV” (Article 4). These Annexes are to be adapted to scientific and technical progress on the basis of the provisions listed in Article 5.

With the contract No. ENV/2013/653452/ETU/C2 implementing Framework Contract No. ENV.C.2/FRA/2011/0020, a consortium led by Eunomia Research & Consulting has been requested by DG Environment of the European Commission to provide technical and scientific support for the evaluation of exemption requests under the new RoHS 2 regime. The work is being undertaken by the Öko Institut and the Fraunhofer Institut IZM, and shall be peer reviewed by Eunomia Research & Consulting. The work has been requested in view of providing technical and scientific support for the evaluation of applications for granting, renewing or revoking an exemption to be included in or deleted from Annexes III and IV of the new RoHS Directive 2011/65/EU (RoHS 2).

## 2 Objectives

The objectives of this project can be outlined as follows:

- Provide a dedicated website which ensures that involved stakeholders will receive all necessary information and can contribute to online consultations (<http://rohs.exemptions.oeko.info>);
- Execute a clear technical and scientific assessment on whether requests for new exemptions are justified in line with the criteria given in Article 5 (1) (a);
- Provide for the involvement and consultation of stakeholders (inter alia producers of electrical and electronic materials, components and equipment, recyclers, treatment operators, environmental organisations, employee and consumer associations), according to Article 5(7);
- Provide a clear and unambiguous wording for the preparation of a Draft Commission Decision for those exemptions, where on the basis of the result of the consultation and the evaluation, an exemption can be justified.

### 3 Scope

In agreement with the Commission, 5 exemption requests (4 concerning new exemptions and one for the renewal of an existing exemption) will be evaluated. Table 1 gives an overview on these, covering the use of lead and mercury.

Table 1 Exemption requests that will be evaluated during this project in order of date of submission.

No.	Proposed Wording	Date of Submission	Applicant
2013-1	Lead as thermal stabilizer in Polyvinyl Chloride (PVC) used as base for substrates in amperometric, potentiometric and conductometric electrochemical sensors	07.11.2012	Instrumentation Laboratory Inc. (IL)
2013-2	“CADMIUM in color converting II-VI LEDs (< 10 µg Cd per mm2 of light-emitting area) for use in solid state illumination or display systems “ is suitable, though the following language: “CADMIUM in II-VI color converting material (< 10 µg Cd per mm2 of light-emitting area) for LEDs for use in solid state illumination or display systems “ would be more precise.  (Request for Renewal of Exemption 39 of Annex III of Directive 2011/65/EU)	21.12.2012	QD Vision Inc. (QDV)
2013-3	"Lead in solders used in boards of heart-lung machines" exemption to expire in 2017	29.01.2013	MAQUET Cardiopulmonary AG (MAQUET)
2013-4	Mercury used in high speed rotating electrical connectors (slip ring) with electrical conduction paths that have sealed liquid mercury, molecularly bonded to the contacts.	29.04.2013	ACIST Medical Systems (ACIST)
2013-5	Cadmium in light control materials used for display devices	05.06.2013	MMM (3M)

### 4 Project set-up

The overall project is led by Carl-Otto Gensch. At Fraunhofer IZM the contact person is Otmar Deubzer. The project team at Öko-Institut consists of the technical experts Yifaat Baron and Markus Blepp.

The exemption evaluation will be performed in close co-operation with the European Commission and stakeholders (electrical and electronic industry and its associations, NGOs, independent experts etc.). This includes:

- Central communication access for stakeholders via the project-specific e-mail account [rohs.exemptions@oeko.de](mailto:rohs.exemptions@oeko.de);
- Project-specific website at <http://rohs.exemptions.oeko.info/> where relevant documents and project activities will be published;
- Information for stakeholders via website and via mailing lists for which stakeholders can register;
- Preparation and management of stakeholder consultations on new exemption requests via project website;
- Technical and scientific evaluation of stakeholder input and further procedure for receiving a sound basis with a high level quality of data and information and for cross-checking information for technical correctness and confidentiality issues;

- Stakeholder workshop or meetings where necessary.

## 5 Time schedule

Assignment of project tasks to Öko-Institut and Fraunhofer IZM started 14 June 2013 and will run over a period of 9 months, thus ending 13 March 2013. An interim report is to be delivered to the European Commission after two months. The final report is due at the end of the project.

The stakeholder consultation will start in August 2013. If a stakeholder workshop is appropriate it will take place in winter 2013-2014.