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**Study to assess 2 RoHS exemption requests [#1 Cadmium in color converting II-VI LEDs (<math><10 \mu\text{g Cd per mm}^2</math> of light-emitting area) for use in solid state illumination or display systems (Request for renewal of Exemption 39 of Annex III of Directive 2011/65/EU); #2 Cadmium in LCD Quantum Dot Light Control Films and Components]**

Project Description Pack 10 – 2015

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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 (EEE) 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/2015/SI2.712769/ETU/A2 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 Oeko-Institut 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 two requests for exemption (one renewal request and one request for a new exemption) 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

The scope of the current consultation concerns the revision of two exemptions, as shown in Table 1 below, which have been evaluated in the past. The evaluation of the requests has been commissioned through the project “Pack 10”.

In December 2012 the Commission received a request for the renewal of Annex III exemption 39, and in May 2013 the request for a new Annex III exemption. The exemptions, both dealing with cadmium quantum dot applications, were both evaluated in the course of an evaluation performed in 2013-2014<sup>1</sup>. The final report was published in April 2014.<sup>2</sup>

On the 20 May 2015, the European Parliament objected to the Commission Delegated act adopted on the basis of the mentioned report, claiming that the report need be updated,<sup>3</sup> Thus the reevaluation of these requests is to be performed.

Table 1 gives an overview on the exemptions to be evaluated, covering the use of cadmium in the relevant applications. The assigned request number is based on the original request number assigned in the first evaluation.

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

Request No.	Requested formulation	Applicant
2013-2	Cadmium in colour converting II-VI LEDs (< 10 µg Cd per mm <sup>2</sup> of light-emitting area) for use in solid state illumination or display systems (Request for renewal of exemption 39 of Annex III of Directive 2011/65/EU);	QD Vision, Inc.
2013-5	Cadmium in LCD Quantum Dot Light Control Films and Components	3M Optical Systems Division

### 4 Project set-up

The overall project is led by Carl-Otto Gensch. The project team at Oeko-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);

<sup>1</sup> For details please see the following link to the consultation page and refer to Request 2013-2 and 2013-5:  
<http://rohs.exemptions.oeko.info/index.php?id=179>

<sup>2</sup> See report under:  
[http://rohs.exemptions.oeko.info/fileadmin/user\\_upload/RoHS\\_IX/20140422\\_RoHS2\\_Evaluation\\_Ex\\_Requests\\_2013-1-5\\_final.pdf](http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_IX/20140422_RoHS2_Evaluation_Ex_Requests_2013-1-5_final.pdf)

<sup>3</sup> See under: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2015-0205+0+DOC+XML+V0//EN&language=EN>

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- 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 Oeko-Institut started 25 August and will run over a period of 8 months, thus ending 24 April 2016. An interim report shall be delivered to the European Commission in November. The final report is due at the end of the project.

The stakeholder consultation is planned to start in October 2015. If a stakeholder workshop is appropriate it will most likely take place in Winter 2016.