# **Consultation Questionnaire Exemption No. 10(d)**

Review of exemption 10(d) "Lead in the dielectric ceramic materials of capacitors compensating the temperature-related deviations of sensors in ultrasonic sonar systems"

#### **Abbreviations and Definitions**

USS ultrasonic sonar systems

### **Background**

The Öko-Institut together with Fraunhofer IZM has been appointed by the European Commission within a framework contract<sup>1</sup> for the review of exemptions in Annex II of Directive 2000/53/EC (ELV Directive). The aim of this project is to evaluate whether the use of lead in the above mentioned exemption is still unavoidable and the continuation of the exemption is therefore justified in line with Art. (4)(2)(b)(ii) of the ELV Directive.

The exemption request<sup>2</sup> resulting in exemption 10(d) was reviewed in 2009. It was found that the use of lead is still unavoidable, but that lead-free alternatives are under development.<sup>3</sup> The exemption is due for review in 2014.

#### Questions

- 1. Please explain whether the use of lead in the application exempted under exemption 10(d) of the ELV Directive is still unavoidable so that Art. 4(2)(b)(ii) of the ELV Directive would justify the continuation of the exemption.
- 2. In case the substitution of lead is not viable, please explain the efforts you undertook to find a lead-free alternative.

<sup>&</sup>lt;sup>1</sup> Contract is implemented through Framework Contract No. ENV.C.2/FRA/2011/0020 led by Eunomia

<sup>&</sup>lt;sup>2</sup> For details see Öko-Institut (2010), page 201 to 203

<sup>&</sup>lt;sup>3</sup> For details see Öko-Institut (2010), page 212 to 215

- 3. Please indicate how much lead would be used under this application and substantiate the amount of lead with a calculation for vehicles put on the European market, and worldwide.
- 4. Please provide a roadmap towards ELV-compliance if the use of lead is still unavoidable. Please break down the roadmap into steps to be performed, and present and explain the related timelines.

## 2 References

Öko-Institut 2012 <a href="https://circabc.europa.eu/sd/d/028653b5-291c-43aa-a1bd-">https://circabc.europa.eu/sd/d/028653b5-291c-43aa-a1bd-</a>

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Gensch, Öko-Institut; Otmar Deubzer, Fraunhofer Institute for Reliability and Microintegration IZM: Adaptation to scientific and technical progress of Annex II to Directive 2000/53/EC (ELV) and of the Annex to Directive 2002/95/EC (RoHS), revised version of the final report, Freiburg, 28 July 2010, retrievable rom

https://circabc.europa.eu/sd/d/a4bca0a9-b6de-401d-beff-

6d15bf423915/Corr\_Final%20report\_ELV\_RoHS\_28\_07\_2010.pdf; last

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