

Questionnaire 4 Exemption 5 of RoHS Annex IV

Acronyms and Definitions

LCA	Life cycle assessment
Pb	Lead

1. Background

Bio Innovation Service, UNITAR and Fraunhofer IZM have been appointed¹ by the European Commission through for the evaluation of applications for the review of requests for new exemptions and the renewal of exemptions currently listed in Annexes III and IV of the RoHS Directive 2011/65/EU.

You submitted information to substantiate your request for the renewal of the above-mentioned exemption. This information was reviewed and as a result, we ask you to kindly answer the below questions for further clarification of your request until 25 March 2021 latest.

2. Questions

- 1) We would like to assess whether the LCA fulfils the requirements of the ISO standard 14040/44. In that context, the European Commission considers LCAs in the context of RoHS exemption requests as “comparative assertion intended to be disclosed to the public”, which, according to ISO 14044, would require a critical review by a review panel.
 - a) Was the LCA reviewed by a review panel or only by one external party? If there was a review panel, could you please provide the review statements.
 - b) Were the data sets part of the critical review? Depending on the complexity of the product system under study, not all data sets can and should be part of a critical review. However, as the comparison of lead and tungsten depends strongly on very few data sets, these should be part of the critical review.

COCIR discussed with the EC Policy Officer in charge of RoHS in 2018 about the need to have an LCA study fully compliant with ISO 14040. The conclusion was that, given the simple comparative study and the additional burden in terms of resources, full compliance with ISO14040 was not required. For this reason, the review by an independent panel was not included in the study performed by ThinkStep but, nonetheless, COCIR gave RINA the task to review the Thinkstep study.

The LCA was reviewed by RINA and the results are in the report which was submitted by COCIR together with the exemption renewal request. RINA is independent of Thinkstep who carried out the LCA.

Only some of the data was part of RINA’s review. The industry data and some of the published data used by Thinkstep was not provided to RINA as most of this is the property of Thinkstep and is not publicly available. However, Thinkstep are reputable experts on LCAs who we are aware follow the ISO standard 14040/44 which includes data acquisition (also explicitly requested by COCIR). Overall, RINA’s opinion was that the final LCA results make good sense and similar results are published in other sources including

¹ It is implemented through the specific contract 070201/2020/832829/ENV.B.3 under the Framework contract ENV.B.3/FRA/2019/0017

reference 4 of COCIR's exemption 5 renewal request. The much larger energy intensity of tungsten manufacture compared with lead is well known and the LCA results are fully consistent with this. RINA therefore accepted that the raw data used by Thinkstep would have been reliable and representative of tungsten and lead mining, refining and manufacture.

Please note that answers to these questions may be published as part of the evaluation of this request. If your answers contain confidential information, please provide a version that can be made public along with a confidential version, in which proprietary information is clearly marked.

It would be helpful if you could kindly provide the information in formats that allow copying text, figures and tables to be included into the review report.