Consultation Questionnaire for Renewal of Exemption 9 of RoHS Annex IV

Table 1: Currently valid wording of the exemption

|  |  |  |
| --- | --- | --- |
| No. | Current exemption wording | Current scope and dates of applicability |
| IV-9 | Cadmium in helium-cadmium lasers | Applies to categories 8 and 9.  Expires on   * 21 July 2021 for category 8 other than in-vitro diagnostic medical devices and for category 9 other than industrial monitoring and control instruments. * 21 July 2023 for category 9 in-vitro diagnostic medical devices. * 21 July 2024 for category 9 industrial monitoring and control instruments. |

Acronyms and Definitions

Cat. Category, referring to the categories of EEE specified in Annex I of the current RoHS Directive 2011/65/EU

Cd Cadmium

COM European Commission

Cadmium-free Not containing cadmium in the applications in scope of the exemption to be reviewed

DPSS Diode pumped solid state, used with lasers (DPSS lasers)

EEA European Economic Area (EU 27 + Iceland, Liechtenstein and Norway)

EEE Electrical and electronic equipment

EU European Union

He Helium

IMCI Industrial monitoring and control instrument

1. Introduction
   1. **Background**

Bio Innovation Service, UNITAR and Fraunhofer IZM have been appointed[[1]](#footnote-2) 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.

On 19 January 2023, JBCE requested the renewal of the above exemption with the below scope and applicability dates.

Table 2: Requested exemption

|  |  |  |
| --- | --- | --- |
| No. | Requested exemption | Requested scope and dates of applicability |
| *IV-9* | *Cadmium in helium-cadmium lasers* | *Applies to category 9 monitoring and control instruments.*  *Expires on 21 July 2031 (2024 + 7 years)* |

The applicant was requested to respond to a clarification questionnaire prior to this stakeholder consultation to complete missing information. This questionnaire along with the exemption application and – if submitted – further information or supporting evidence from other stakeholders are accessible on the stakeholder consultation web page.[[2]](#footnote-3)

The stakeholder consultation is part of the review process for the exemption request at hand. It addresses third parties – not the applicants – to provide and to evaluate information and evidence according to the criteria listed in Art. 5(1)(a) of Directive 2011/65/EU.[[3]](#footnote-4)

**To contribute to this stakeholder consultation, please answer the below questions until 19 January 2024.**

**Please also see the applicants’ renewal request form and – if submitted – further information on the consultation web page[[4]](#footnote-5).**

* 1. **Summary of the exemption request**

JBCE describe Raman Spectroscopy as a non-destructive chemical analysis technique which provides detailed information about chemical structure, phase and polymorphy, crystallinity and molecular interactions. It is based on the interaction of light with the chemical bonds within a material. Helium cadmium lasers enable wavelengths of 325 nm to be used in Raman spectroscopy measurements. Diode Pump Solid State (DPSS) lasers, as an alternative to helium cadmium lasers, can be used in many applications. However, although DPSS lasers can be used for Raman spectroscopy, at the moment 325 nm DPSS lasers for Raman spectroscopy are not available commercially, due to a lack of stability and precision. Therefore, the extension of the exemption is required for helium cadmium lasers to continue to be used in Raman applications.

1. Questions
2. Please let us know whether you support or disagree with the wording, scope and requested duration of the exemption. To support your views, please provide detailed technical argumentation / evidence in line with the criteria4 in Art. 5(1)(a). If applicable, please suggest an alternative wording and/or duration and explain your proposal.
3. The applicants discuss in their exemption request and in the clarification forms the applications of helium-cadmium lasers and mention other technologies which they deem inappropriate to substitute or eliminate the use of cadmium.

Please provide information concerning these or possibly other technologies as to their potential to substitute or eliminate at present or in the closer future the use of the restricted substances in the application at hand so that the requested exemption could be restricted or revoked.

1. Please provide information as to research to find alternatives that do not rely on the exemption under review (substitution or elimination), and which may cover part or all of the applications in the scope of the exemption request.
2. Please provide a roadmap of such on-going substitution/elimination and research (phases that are to be carried out), detailing the current status as well as the estimated time needed for further stages.
3. As part of the evaluation, socio-economic impacts shall also be compiled and evaluated. For this purpose, if you have additional information on socioeconomic aspects that are expected to arise if the exemption is not renewed as requested, please provide details in respect of the following:
   1. What are the volumes of EEE in the scope of the requested exemptions which are placed on the market per year?
   2. What are the volumes of additional waste to be generated should the requested ex-emption not be renewed or not be renewed for the requested duration?
   3. What are estimated impacts on employment in total, in the EU and outside the EU, should the requested exemption not be renewed or be renewed for less than the re-quested time period? Please detail the main sectors in which possible impacts are expected – manufacturers of equipment in the scope of the exemption, suppliers, re-tail, users of MRI devices, etc.
   4. Please estimate additional costs associated should the requested exemption not be renewed, and how this is divided between various sectors (e.g. private, public, industry: manufacturers, suppliers, retailers).
4. Any additional information which you would like to provide?

**Please note that answers to these questions will be published as part of the evaluation of this exemption 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. Additionally, please also add “confidential” to the file name.**

**Please do not forget to provide your contact details (Name, Organisation, e-mail and phone number) so that the project team can contact you in case there are questions concerning your contribution.**

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

1. Implemented through the specific contract 070201/2020/832829/ENV.B.3 under the Framework contract ENV.B.3/FRA/2019/0017 [↑](#footnote-ref-2)
2. C.f. consultation web page, <https://rohs.biois.eu/requests2b.html> [↑](#footnote-ref-3)
3. Directive 2011/65/EU (RoHS) available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT> [↑](#footnote-ref-4)
4. Consultation web page: <https://rohs.biois.eu/requests2b.html> [↑](#footnote-ref-5)