Consultation Questionnaire Exemption 8(b) of RoHS Annex III

Table 1: Currently valid wording of the exemption III-8(b) series

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| --- | --- | --- |
| No. | Current exemption wording | Current scope and dates of applicability |
| III-8(b) | Cadmium and its compounds in electrical contacts | Applies to categories 8, 9 and 11.  Expires on   * 21 July 2021 for categories 8 other than in vitro diagnostic medical devices and for cat. 9 other than industrial monitoring and control instruments; * 21 July 2023 for category 8 in vitro diagnostic medical devices; * 21 July 2024 for category 9 industrial monitoring and control instruments, and for category 11. |
| III-8(b)(I) | Cadmium and its compounds in electrical contacts used in:   * circuit breakers, * thermal sensing controls, * thermal motor protectors (excluding hermetic thermal motor protectors) * AC switches rated at: * 6 A and more at 250 V AC and more, or * 12 A and more at 125 V AC and more * DC switches rated at 20 A and more at 18 V DC and more, and * switches for use at voltage supply frequency ≥ 200 Hz | Applies to categories 1 to 7 and 10.  Expires on 21 July 2021 for categories 1 to 7 and 10. |

Acronyms and Definitions

Cadmium-free Not containing lead (Pb) in the applications in scope of the exemption to be reviewed.

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

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

EEE Electrical and electronic equipment

EU European Union

IMCI Industrial monitoring and control instruments

# Background and objectives of this review

Bio Innovation Service, UNITAR-SCYCLE and Fraunhofer IZM have been appointed[[1]](#footnote-2) by the European Commission for the evaluation of applications for new exemptions and the renewal of exemptions currently listed in Annexes III and IV of the RoHS Directive 2011/65/EU.

TMC requested the renewal of exemption 8(b) with its current wording for the maximum validity of seven years for cat. 9 industrial monitoring and control instruments (IMCI). 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 - 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)

Exemptions III-8(b) and III-8(b)(I) were reviewed by Deubzer et al. (2022). They recommended renewing exemption 8(b) as exemption 8(b)(II) with a narrowed scope and with expiry dates in 2023 and 2025 (c.f.Table 2).

Table 2: Potential renewal of exemption III-8(b) as exemption III-8(b)(II)

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| --- | --- | --- |
| No. | Requested exemption | Requested scope and dates of applicability |
| 8(b) | Cadmium and its compounds in electrical contacts | Applies to categories 8, 9 and 11  Expires on   * [date of official publication of the COM decision in the Official Journal + 12 months] for cat. 11 * [date of official publication of the COM decision in the Official Journal + 18 months] for category 8 medical devices including in-vitro diagnostic medical devices, and category 9 monitoring and control instruments including industrial monitoring and control instruments |
| 8(b(II) | Cadmium and its compounds in electrical contacts used in:   * circuit breakers * thermal sensing controls * thermal motor protectors (excluding hermetic thermal motor protectors) * AC switches * DC switches | Applies to categories 8 and 9 from [date of the official publication of the COM decision in the Official Journal + 18 months + 1 day] on.  Expires on   * 31 December 2023 for circuit breakers in rotating parts of computer tomography (CT) medical devices (category 8 medical devices others than in-vitro diagnostic medical devices) * 31 December 2025 for portable emergency defibrillators (cat. 8 medical devices others than in-vitro diagnostic medical devices) with a Declaration of Conformity (DOC) issued for the first time before 1 January 2015 * **31 December 2025** for other cat. 8 medical devices including in-vitro diagnostic medical devices, and **for category 9 monitoring and control instruments including industrial monitoring and control instruments**. |

Source: Deubzer et al. (2022)[[4]](#footnote-5)

The European Commission (COM) have not yet officially published their decision as to the adoption of the above recommendation. The COM wishes the consultants to assess in this current review round whether there are any substantial reasons in line with Art. 5(1)(a) against the adoption of the above recommendation for EEE of categories 8, 9 and 11. This implies that the consultants will assess whether the validities of exemptions whose renewal is requested for cat. 8, 9 or 11 may exceed the validities recommended in the previous review (Table 2), in this case 31 December 2025 for cat. 9 IMCIs.

**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[[5]](#footnote-6).**

# Questions

1. Do you agree with TMC’s request to renew exemption 8(b) for cat. 9 IMCI instead of replacing it by exemption 8(b)(II) as recommended in the last review?

Do you agree with TMC’s request to extend the renewed exemption beyond 2025, which Deubzer et al. (2022) assessed as appropriate expiry date for cat. 9 IMCI in the last review with agreement of the applicants that participated in the 2021/2022 review?

1. In their answers to the clarification questionnaire TMC recommend the 7 year renewal of exemption 8(b) in its current wording for cat. 9 IMCIs. They state that the renewed exemption 8(b)(II) would not cover all *the electrical contacts that cat 9 utilizes to isolate circuits from high voltage circuits, inductive load switching and control relays.*TMC do not provide specific examples for electrical contacts that would not be covered. The stakeholders in the last review of this exemption in 2021/2022 had agreed that exemption 8(b)(II) would cover all applications of cadmium in electrical contacts for cat. 9 IMCIs.

Do you see any applications of cadmium in electrical contacts in cat. 9 IMCIs which exemption 8(b)(II) would not cover?

1. TMC request the renewal of the exemption for the maximum 7 years until 2031 while producers of switches/electrical contacts will have finalized the substitution of cadmium conversion for the last few percentages of their products by the end of 2023 latest (protective switches, i.e. circuit breakers, thermal sensing controls and motor protectors) and until end of 2025 for the other switches (c.f. Deubzer et al. (2022)). TMC were asked how their members would maintain the production of IMCIs with cadmium-contacts after 2025. *They replied that, besides purchasing critical components via last-time buys, niche manufacturers can provide the required parts where the criticality of the part can bare the cost of such a premium part to allow the continued manufacturing of highly specialized equipment like electron microscopes.*
   1. Do you know of any niche manufacturers that supply electrical contacts containing cadmium after 2025?
   2. Which products do these niche manufacturers offer?
2. *TMC state in the clarification questionnaire that their members’ IMCIs have model life times of 10 years on average, i.e. a model of an IMCI is produced is produced and placed on the market for around 10 years until it is replaced by a new model. In the light of the rapid technological development, this is feasible nevertheless IMCIs TMC members’ IMCIs are limited by physics rather than technology changes.*

Do you support the above statements, in particular also with respect to the substitution or elimination of cadmium in electrical contacts?

1. TMC provided a socioeconomic analysis related to the above exemption request. The document is available online in the consultation folder for this exemption.
   1. Do you agree with the underlying method, data and conclusions?
   2. Do you have different or additional information as to the socioeconomic impacts that might arise if exemption 8(b) would be renewed as exemption 8(b)(II) instead of 8(b)?

**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.**

**We ask you to kindly provide the information in formats that allow copying text, figures and tables so that they can be included into the review report.**

**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.**

References

Deubzer et al. (2022): Study to assess requests for renewal of 12 exemptions to Annex III of Directive 2011/65/EU Under the Framework Contract: Assistance to the Commission on technical, socio-economic and cost-benefit assessments related to the implementation and further development of EU waste legislation. Final Report. Pack 23. in cooperation with Dr. Otmar Deubzer (Fraunhofer IZM and UNITAR], Jana Rückschloss (Fraunhofer IZM) and Christian Clemm (UNITAR)Deubzer et al.Dr. Otmar Deubzer (Fraunhofer IZM and UNITAR]; Jana Rückschloss (Fraunhofer IZM); Christian Clemm (UNITAR)https://​data.europa.eu​/​doi/​10.2779/​507661Study to assess requests for renewal of 12 exemptions to Annex III of Directive 2011/65/EU Under the Framework Contract:

Gensch et al. (2016): Assistance to the Commission on Technological, Socio-Economic and Cost -Benefit Assessment Related to Exemptions from the Substance Restrictions in Electrical and Electronic Equipment - Study to assess renewal requests for 29 RoHS 2 Annex III exemptions, in cooperation with Carl-Otto Gensch, Yifaat Baron, Markus Blepp, Katja Moch, Susanne Moritz, Oeko-Institut and Dr. Deubzer, Otmar, Fraunhofer Institut Zuverlässigkeit und Mikrointegration IZMGensch et al.Carl-Otto Gensch; Yifaat Baron, Markus Blepp, Katja Moch, Susanne Moritz, Oeko-Institut; Dr. Deubzer, Otmar, Fraunhofer Institut Zuverlässigkeit und Mikrointegration IZMhttps://​circabc.europa.eu​/​sd/​a/​eda9d68b-​6ac9-​4fb9-​8667-​5e561d8c957e/​RoHS-​Pack\_​9\_​Final\_​Full\_​report\_​Lamps\_​Alloys\_​Solders\_​June2016.pdf

1. It is 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. the consultation web page for group 2 exemptions: <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. C.f. BIO IS, <https://rohs.biois.eu/RoHS_Pack-23_Report_Final_20221220.pdf> [↑](#footnote-ref-5)
5. Consultation web page: <https://rohs.biois.eu/requests2.html> [↑](#footnote-ref-6)