Public consultation on Electrical equipment - mercury in other discharge lamps for special purposes (RoHS exemption)

Input of the European Ecodesign Coalition

Brussels, 1 July 2021

The European Ecodesign-Coalition, representing artists, manufacturers and service providers in the theatre and entertainment technology sectors, appreciates the EU Commission's efforts to reduce the use of hazardous substances in products brought into the European Market. We have been working together with Lighting Europe to achieve the best possible solutions for our small and specialist market of stage and studio lighting, or "entertainment lighting".

In general, discharge lamps for special purposes that contain small amounts of mercury are still quite common but more and more are being replaced in the wider entertainment industry, film sector and live performance organisations such as theatres due to technological progress for certain applications.

Discharge lamps are predominantly used for high powered automated fixtures (moving lights) and follow spots (high powered lights specifically used for 'following' a performer from a long distance away operated by a human operator). This includes medium to long throw follow spots, high output parallel beam lights, long throw spots and washes.

For theatrical performances, there is an artistic requirement to have one very bright source.

The live touring market sector relies heavily on the visual imagery created by these sources. Touring shows use a lot of small discharge lamps which are highly efficient in terms of output (like Clay Paky Sharpy, Mythos, Robe Megapointe...) and also powerful spots (like Robe BMFL, Martin Viper....).

We would like to underline that the new generation of discharge lamps are far better in terms of energy efficiency than their predecessors, with many lamps designed specifically for entertainment lighting as they have unique characteristics of high interest for live events and for filming.

Regarding the current draft acts on RoHS, we thank the Commission for having taken into account our comments on technical characteristics and requirements of special purpose lamps in the entertainment sector.

The proposed exemption foresees a time period of three years for special purpose lamps.

However, in the context of exemptions for special purpose lamps, we consider it important to underline changes on the market which have an impact on the manufacturing of special purpose lamps in the entertainment sector. Up to now, our market has been working mainly with four technologies: tungsten, discharge, fluorescents and LED. With Ecodesign and RoHS, the industry shifted to the use of LED technology only, which makes manufacturers dependant on a few suppliers based in Asia. With the current electronic components shortage (in addition to the long health crisis which heavily affected the live performance industry and suppliers) it is difficult at present to make precise predictions and anticipate what will be available in the next three to five years.

Considering this uncertainty, we advocate an additional exemption with a five-year time period in the scope and dates of applicability in Annex III to Directive 2011/65/EU, entry 4(f):

V: Mercury in high pressure mercury vapour lamps used for entertainment lighting where a luminous flux \geq 82,000 *lumen is required.*

Currently, there are no available suitable substitutes for these lamps (with their quality of high luminous flux, density, light distribution, cooling requirements including low noise operation, full spectrum/high CRI light output). There are recycling programmes for these lamps in place, and we expect that the industry will be able to develop and provide substitute lamps without mercury or lighting fixtures with other lamp types in the medium term.

The lack of suitable new-technology replacements for high-output, full spectrum light sources that are essential tools of entertainment lighting has already been recognised by the EU Ecodesign team, which has granted an exemption for these kind of light sources for entertainment lighting use in the 2021 Ecodesign regulation. **Providing a similar exemption in the updated RoHS regulations would ensure there were no contradictions between these two sets of regulations.**

The European Ecodesign-Coalition, representing artists, manufacturers and service providers in the theatre and entertainment technology sectors stands ready to further work with the European Commission on exemptions for special purpose lamps used in theatres and for live events and will share any technical expertise that is helpful in the years to come to further define the scope of applicable exemptions under RoHS.

Technical remark:

The European Ecodesign coalition would like to point out that the wording proposed for **4(f)-IV** in the Commission's Annex: "Mercury in high pressure sodium vapour lamps emitting light in the ultraviolet spectrum" is technically incorrect. We therefore propose to amend the draft text in the following way:

4(f)-IV: "Mercury in lamps specially designed for applications that require a high intensity in UV wavelength ranges".

Contribution drafted by the following organisations:

- Pearle* Live Performance Europe: <u>www.pearle.eu</u>
- OETHG: <u>www.oethg.at</u>
- PLASA: <u>www.plasa.org</u>
- VPLT: <u>www.vplt.org/</u>
- ALD: <u>www.ald.org.uk/</u>
- SLF: <u>www.svenska-ljus.se/</u>
- IALD: <u>www.iald.org/</u>
- ROBE: <u>www.robe.cz</u>
- Robert Juliat: <u>www.robertjuliat.fr/</u>
- White Light Ltd: <u>www.whitelight.ltd.uk</u>

The statement of the European Ecodesign-coalition is supported by the Entertainment Services and Technology Association, EFTA based in the United States. <u>www.esta.org/</u>