

Texte zu den geplanten neuen EU-Regelungen zur umweltgerechten Produktgestaltung und zur Energieverbrauchs-kennzeichnung in der Beleuchtung – Zusammenstellung * des Umweltbundesamtes (UBA), Deutschland



Entwürfe der EU-Kommission vom 13. November 2017

Konsultationsforum am 7. Dezember 2017

– Protokoll –

EN: Information on the coming EU Lighting Regulations – Ecodesign and Energy Labelling – Compilation * of the Federal Environment Agency (UBA), Germany

The EU Commission's drafts of 13 November 2017

Consultation Forum on 7 December 2017 — Protocol

FR: Informations sur les futures réglementations de l'UE concernant l'éclairage – l'écoconception et l'étiquetage énergétique – Compilation * de l'Agence Fédérale de l'Environnement (UBA), Allemagne

Les projets de la Commission Européenne du 13 novembre 2017

Forum consultatif du 7 décembre 2017 — Protocole

Indication: Veuillez noter que dans le présent texte la traduction en français se limite aux titres et à quelques indications.

* <https://www.eup-network.de/de/eup-netzwerk-deutschland/offenes-forum-eu-regelungen-beleuchtung/dokumente/texte/>

Liste der Dokumente zum Konsultationsforum am 7. Dezember 2017 und Kennzeichnung des vorliegenden Textes

EN: List of the documents on the Consultation Forum on 7 December 2017 and identification of the text at hand

FR: Liste des documents du forum consultatif du 7 décembre 2017 et marquage de le présent document

Diskussion ◇ **EN:** Discussion ◇ **FR:** Discussion

- Protokoll ◇ **EN:** Protocol ◇ **FR:** Protocole
- Schwerpunkte der Diskussion; Notizen von Christoph Mordziol, UBA ◇ **EN:** Focuses of the discussion; notes by Christoph Mordziol, UBA ◇ **FR:** Thèmes principaux de la discussion; notes de Christoph Mordziol, UBA

Vorträge und Hintergrundinformationen ◇ **EN:** Presentations and background information ◇ **FR:** Exposés et informations de fond

- Vortrag von Herrn Leo Wierda, Van Holsteijn en Kemna ◇ **EN:** Presentation by Mr. Leo Wierda, Van Holsteijn en Kemna ◇ **FR:** Exposé de M. Leo Wierda, Van Holsteijn en Kemna
- Vortrag von Frau Orsola Mautone, EU-Kommission ◇ **EN:** Presentation by Mrs. Orsola Mautone, EU Commission ◇ **FR:** Exposé de Mme. Orsola Mautone, Commission européenne
- Vortrag von Frau Ourania Georgoutsakou, Lighting Europe ◇ **EN:** Presentation by Mrs. Ourania Georgoutsakou, Lighting Europe ◇ **FR:** Exposé de Mme. Ourania Georgoutsakou, Lighting Europe
- Vortrag von Herrn Michael Scholand, CLASP (der Vortrag konnte aus Zeitgründen nicht mehr gehalten werden) ◇ **EN:** Presentation by Mr. Michael Scholand, CLASP (due to lack of time, the presentation could not been held) ◇ **FR:** Exposé de M. Michael Scholand, CLASP (faute de temps l'exposé n'a pas été donné)

Es folgt ein unveränderter Originaltext.

EN: The following is an unmodified original text.

FR: Ce qui suit est un texte original.



28 June 2018

FINAL MINUTES

MEETING OF THE CONSULTATION FORUM

OF THE ECODESIGN OF ENERGY-RELATED PRODUCTS (Directive 2009/125/EC) on the review of Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012 on ecodesign requirements and Commission Regulation (EU) No 874/2012 on energy labelling requirements for lighting products

BRUSSELS, 7 DECEMBER 2017 (10.00 – 17:30)

Participants: See “Attendance List” in Annex

1. WELCOME AND INTRODUCTION

The Chair welcomed the participants and explained the purpose of the meeting i.e. to discuss the results of the review study regarding Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2009 for ecodesign and Regulation (EU) No 874/2012 for energy labelling and the proposed draft working documents.

2. ADOPTION OF THE AGENDA AND APPROVAL OF THE MINUTES OF PREVIOUS MEETINGS

The agenda was adopted without any changes.

3. STATE OF PLAY CONCERNING THE COMBINED ECODESIGN AND ENERGY LABELLING CONSULTATION FORUM

The chair explained that in accordance with the new energy labelling framework regulation, a consultation forum for energy labelling needs to be set up, to be combined with that for ecodesign. The aim is to launch the call for interest for this combined consultation forum in the first quarter of 2019. Existing members of the consultation forum (except for the Member States) need to reapply for membership.

4. PRESENTATION OF THE MAIN FINDINGS OF THE REVIEW STUDY

After a presentation by the Contractor (Van Holsteijn en Kemna) of the review study, the ensuing discussion raised the following points:

Timing for the phase out of all non-LED products – SE asked for clarification on the fact that the study did not look into the possibility to have a phase out of all non-LED lamps in 2024. **The Contractor** stated that the idea to have all conventional lamps phased out in 2024 was one of the controversial points at the previous Ecodesign Consultation Forum of 2015 and that it was removed from the study to reach compromise.

Incandescent special purposes lamps – PL suggested that the EU could focus on the missed savings from incandescent lamps instead of proposing a phase out of T8 fluorescent lamps. Seeing that incandescent lamps are not part of the study, PL stated that although these lamps were banned years ago, they are still a relevant part of the market in the EU because the legislation exempts incandescent lamps for special purposes, also for general use. AT added that this situation is true also for other phased out lamps. **The Contractor** stated that incandescent technologies (except halogens) are not considered anymore in the study.

The Commission Services stated that incandescent lamps should not be on the market any longer, except for minor quantities for special purposes as laid down in the EU legislation and that it is the role of national market surveillance authorities to look at what is placed on the market. On their side, the Commission Services are proposing in the draft texts to tighten the conditions for exemptions, to avoid such loopholes in the future. It would be interesting to have some statistics on the number of lamps on the market.

5. PRESENTATION OF THE WORKING DOCUMENTS

After a presentation by the Commission Services of the working documents the ensuing discussion raised the following points:

5.1. Ecodesign

Article 1 – Scope and Annex I - Exemptions

Placing on the market and Putting into service – CLASP underlined that the concept of "placing on the market" does not imply that users are obliged to replace lamps and systems on the day of application, but that from that day the phased out products would not be allowed to enter the EU market anymore. Lamps in use and in stock can be used with no end date. UK pointed to the fact that the regulation would need to include at some point in the scope the "putting into service" of lighting products in addition to "placing on the market", as lighting may well be provided as a service.

Exemptions – IT asked to exempt lamps used in laboratories, which are normally halogens, and to make it more clear which lamps would be exempted following the requirement for max. 1000 lumen per mm² of projected light-emitting surface area (which are listed in the explanatory memorandum). **LightingEurope** stated that they would like to keep many of the current exemptions for special purpose lamps and they will share two drafting options: a list or, preferably, a definition for special purpose lamps that would close the current loopholes especially for the misuse of incandescent lamps. **LightingEurope** also asked to add as an exemption 'works of art' as defined in Directive 2001/84/EU, because these works are handcrafted in small quantities. PL and DE opposed keeping the exemption for lamps for ambient

temperatures below -30° and above 120°, which creates a major loophole for incandescent lamps as any incandescent lamp can satisfy those values. They proposed to add either a max. voltage of e.g. 25V or restrict the exemption based on the length of the lamp. **ECOS** supported this point and was satisfied with the attempt to close the loophole for decorative lamps. **IALD** asked to keep exemptions for theatre lighting, photosensitive people and photosensitive artworks. **DE** supported the exemption for theatre lighting and stated that exemptions should be a clear cut and easily checkable by market surveillance authorities. DE therefore asked to delete the option to allow "other documentation" to exempt products that were "specifically tested and approved" to operate in the contexts listed in Annex I. **CECED** asked to exempt lamps in range hoods because these lamps are already regulated in a separate regulation. **CER** asked to exempt all lamps that are used on trains, including common T8 lamps, as stockpiling would not help because these lamps are replaced every 3-4 years (according to **the Contractor**: every 15 years). **EIM** added that they would be obliged to retrofit stations and platforms on September 2020. The **Commission Services** clarified that today's interpretation is that common lights not specifically designed and tested for trains are not exempt and asked CER to give data on how many lights would be affected, taking into account the general exemption for means of transport from the ecodesign framework regulation and the specific exemption in Annex I(f) for railway vehicle lighting. The Commission Services clarified to EIM that on September 2020 there would not be new T8 placed on the market, but no station would be obliged to replace them.

Containing products – **AT** stated that it is unclear what a containing product is, supported by **IT**, which also feared that manufacturers/importers of containing products may ignore that they are subject to a requirement that covers a product within their products. **SE** considered that when the lighting products in scope of the regulation are contained in a product, they should satisfy the ecodesign requirements and supported the proposal that the manufacturer of a containing product should give the information on the type of light source used and its energy class. **DK** stated that they feel relatively confident that they can work with having containing products in scope. **IALD** is very concerned about the burden that would be imposed on the producers of containing products. **LightingEurope** stated that, with light sources and control gears in scope, the definition of the scope should make it clear that containing products are not in scope. **Independent Retail Europe** stated that a containing product which is already subject to an energy label, like fridges, should not be required to have a second energy label for the lighting product that it contains. **The Commission** clarified that this will not be the case: the requirement is to inform on the type of light and energy class of the light source contained in the product. **CECED** was happy with this clarification but asked: 1. to exempt containing products which are already covered by energy labelling; 2. to anyway clarify if the date of placement on the market of a lamp in a containing product would be that of the lamp itself or of the containing product; and 3. to exempt lamps which are today used in fridges and similar products, in order to keep replacements available (and avoid to throw away the fridge when the lamp breaks, in line with the "repair as produced principle"). **The Commission Services** asked CECED for evidence and more information on this last point and replied that if the lamp was placed on the market before it is integrated in a containing product, the lamp date stays valid. **The Commission Services** asked for drafting contributions on this point, stating that it is important to agree on the principle.

Article 2 – Definitions and Annex II – Definitions

Merging article 2 and Annex II – SE asked to merge them.

White light definition (chromaticity coordinates x,y) – SE and DK showed concern about the narrowing of the white light area that would leave many common products out of scope. In support of this point, **BE** added that having special purpose lamps naturally falling out of the scope, would be a step back for consumers protection, as these lamps will not be subject any longer to information requirements. **CLASP** (supported by **SE**) asked to re-expand the white light area something mid-way and also asked the Commission to consider replacing the x,y space, with the method "u prime, v prime", which is easier to understand and visualise. **UK** would like to know more about the calculations to expand the white light area. **CLASP** will share slides with all participants and **the Commission** will check the "u prime, v prime" method. **The Contractor and the Commission** clarified that the white area is the same than the one already used in two of the three current regulations. The currently bigger white area in the third regulation has required laying down exemptions for many special purpose lamps, whose verification has been time and resource consuming for market surveillance authorities. With the proposed definition of white area, fewer exemptions would be needed and the administrative burden would be reduced. There is no requirement for products out of scope to prove that they are out of scope. **LightingEurope** welcomed the alignment of the white light area to two of the three current regulations and stated that they would not see risk of loopholes from this. **The Commission** will better investigate how many products would naturally fall out of scope.

Containing product which is itself a light source (see also the discussion on article 4) – AT asked to clarify if fully integrated luminaires are in scope or not: the confusion would come from the last sentence of definition (1) "light source", which proposes to consider as the light source in scope "the smallest physical unit that can be readily removed from the containing product". **The Commission** reminded that the aim of that sentence, together with the provisions on removability in article 4 supporting a circular economy, is to avoid sealed luminaires. **IT** commented that it is impossible to avoid sealed luminaires (e.g. lights for underwater use) and added that "the smallest physical unit" is confusing (for example, in a LED module, would it be the single LED?). Also in the case of a fridge, what would be the containing product: the fridge or the grid that contains that LED? **CLASP** noted that lights for marine applications are exempt. **DE** stated that without a clear definition for the "smallest physical unit", there could be loopholes. **NL** proposed to delete the last sentence of definition (1) "light source", as it is already clear that a fully integrated luminaire is assimilated to a light source and thus it is in scope. **DK** supported the deletion of the sentence but stressed the need to identify a light source for verification purposes: an option is that if it is not possible to remove the lighting product from a containing product, the whole containing product may be tested as a lighting product. **SE** supported the Commission's proposal to have all lights removable. **SE** added that the ambition in any case should not be lower than having a fully integrated luminaire tested as a light source.

Luminous flux < 1000 lumen per mm² of projected light-emitting surface area – IT stated that this definition is useless and badly written, and would send suggestions to improve the definition.

Luminous flux – **SE** proposed to lower the minimum level of luminous flux from 60 lumen to 30 lumen, in order to have in scope "cosy" lamps with soft light that are popular in Scandinavia for general lighting needs. **DE** supported this point.

Useful luminous flux/Total luminous flux – **CLASP** proposed to drop the definition of "useful" luminous flux for directional lamps and use instead the "total" luminous flux, as in a normal environment all forward lumens from a directional lamp are useful and not only those in a cone. Using the total flux would allow market surveillance authorities to use integrating spheres instead of goniophotometers for measuring these light sources, which would lower costs, lead to more market surveillance and simplify the calculation formula proposed in the draft legislation by removing the correction factors. **SE** supported **CLASP** and confirmed that it is much easier to measure the total flux than the useful flux. **IALD** replied in favour of calculating the useful luminous flux, saying that what counts for the designer is the directionality of lights in order to have the right light at the right place.

Separate control gear – **DE** asked to clarify the wording for a separate control gear that is part of a containing product.

Fluorescence or fluorescent light source – **IT** would send suggestions to improve this definition.

Extra low voltage – **CECAPI** asked to refer to alternate current too and not only to direct current.

Stand-by – **NL** would send suggestions to align this definition to the standby legislation.

Portable battery-operated product – **CECED** asked to explain the limitation to 24 V.

Definitions in the energy labelling act – **IT** asked to check that the same definitions are worded the same in the ecodesign and the energy labelling acts.

Article 3 – Ecodesign requirements

See comments to Annex III.

Article 4 – Removal of light sources and separate control gears

CLASP stated that it is an excellent proposal to have luminaires serviceable and brought the experience of the industry voluntary initiative Zhaga, which published standards on the serviceability of products. **IALD** underlined that we are not in a world of light bulbs anymore, rather in a world of electronic components. As the efficiency of an electronic component is determined by its thermal coupling, making a product dismountable affects its efficiency. **IALD** suggested limiting the discussion to replaceable control gear, because a chip control gear makes a product fail early. **AT** stated that removability of light sources is a highly important issue, in particular for domestic luminaires where there are many cheap products, and proposed to consider a warranty on the lifetime of office products and systems rather than imposing disassembly given that the professional sector often claims a lifetime of 20 years for lighting systems. **BE** asked: 1. to clarify when this article

would apply; 2. if it relates to end of life or repair; 3. to better define "qualified professionals"; 4. to clarify requirements about the availability of spare parts; 5. clarification on safety in case of self-repair; 6. where the instructions would be available; 7 to bring this discussion in the horizontal forum on material efficiency. **The Commission** clarified that article 4 would apply from 1 September 2020 and that the horizontal work on material efficiency does not yet address specific product requirements. **DE** highlighted that this is an important issue but that 2020 is difficult and asked the Commission to lay down a roadmap and to specify the concept, as "removability" is a necessary but not sufficient condition to have a circular economy. **NL** stated that article 4 is a useful article and suggested to add a third step to the removability by the end user or by a professional: the fact that when the light source is not removable, the whole product is considered a light source for the purposes of this regulation. **IT** commented that the principle is fully shareable, but it should be based on a clear idea of what a light source is. **IT** shared the proposal made by **NL** and the concerns from **IALD** on the electronic components. **IT** also agreed with **BE** on the need to clarify the safety conditions for removability and with **DE** on the need for a roadmap. **ANEC** welcomed article 4, reported that non-removability is a raising trend (in 2016 from a survey on LED luminaires in 40% of the cases removability was not possible – it was 30% in 2015) and asked to expand the concept from "removable" to "replaceable". **EuRIC** supported this article, which would mirror the **WEEE** directive, and suggested to reconsider the wording "readily removable", as the term "readily" used in the battery directive was identified as lacking concreteness. **LightingEurope** shared the principle and the vision but the timeline is not feasible and there is the need to look into safety issues. An impact assessment on removability would be needed. **CEN TC169** informed on the ongoing work in **CEN TC10** on circular economy, where this discussion could be developed. **EEB** expressed strong support and proposed to include a second tier to resolve the concern of timing; **EEB** considered the safety issue overestimated as we daily replace light bulbs in our homes. As for professional products, **EEB** suggested, by way of exception, replacing the removability condition with durability, having minimum 40 000 hours lifetime guaranteed. **The Commission Services** replied that further concrete suggestions would be welcome.

Permanent mechanical damage – **SE**, **NL** and **DK** asked the permanent mechanical damage requirement to be applied not only to the lighting product but also to the containing product. **NL** added that standards are not needed for this requirement. **DK** specified that the containing product should not be damaged for verification purposes.

Article 5 – Circumvention

Date of application – **BE** asked when this article would apply. **The Commission Services** replied that they would check and as far as possible harmonise the approach for all regulations that are currently under discussion.

Article 6 – Conformity assessment

Technical documentation – **BE** asked about the reason to have the technical documentation mentioned in this article. **The Commission Services** replied that it is a common article with regulations for other products and would check.

Article 7 – Verification procedures for market surveillance authorities

No comments.

Article 8 – Indicative benchmarks

No comments.

Article 9 – Repeal

No comments.

Article 10 – Revision

Review drafts – EEB asked to specify that the text to be presented to the Ecodesign Consultation Forum no later than 1 September 2022 would be the draft legislative text.

Article 11 – Entry into force

Alignment with energy labelling – DE asked that the date of application would be synchronised with the new energy labelling for lighting products. The Commission Services confirmed that this is the intention.

Annex III – Energy efficiency requirements

1. Energy efficiency requirements

Table 1 on light sources in scope – ECOS commented that the end loss factors are too high and may undermine the ambition; they will provide proposals. **IT** asked to expand the line "Other light sources in scope", in order to make clear all the lights that are concerned (especially LED is not mentioned).

Number of tiers – SE asked to add a second tier at 2023 to phase out all non-LED technologies and to consider moving the phase out of T8 to this second tier. **CLASP** supported a second tier, suggesting, as second-best options, to either apply the same approach of Reg. (EU) 1194/2012 (i.e. that the second tier should apply on a specific date only if evidence is produced by the Commission on its feasibility) or setting the tier 2 date later. **NL** agreed that a second tier could be a solution for certain aspects, including the T8 phase out and the removability requirement, but, together with **AT**, opposed setting tiers that would apply after review dates. **ECOS** suggested that a second tier could include the application of article 4 on removability. This was supported by **EEB**, which added the reduction of standby power limit to 0.2 and the phase out of all lamps containing mercury.

Correction factors – IT asked to delete "C" in the column "Bonus on C" in Table 2 because it is redundant. **DK** asked to have the same table in the ecodesign and in the energy labelling acts. **CLASP** repeated its comment made for Article 2/Annex II about using the "total flux" instead of the "useful flux" because this would simplify the calculation formula proposed in the draft legislation, by removing the correction factors.

Energy savings – CER stated that the quality of the lighting should be taken more into account, as energy savings are not always comparable to the watt output.

T8 phase out – LightingEurope stated that a phase out in September 2020 of T8 lamps is too early and proposed to add a tier for this (e.g. at 2023). LightingEurope added that it could be useful to check in which areas the phase out would cause problems and asked the contractor VHK if they made a sensitivity analysis on the phase out timing. **The Contractor** replied that they did so and that for every year of delayed phase out, there would be a loss of around 2-3 TWh of energy savings. **CER** and **EIM** stated that the railway sector is one of the problematic areas and that they need more time for the phase out. **SE** stated that they would not be happy with delaying the phase out of T8 and that a business model based on LED technologies would improve security, safety and statics. On the contrary, **PL** stated the delay is necessary because there are no suitable LED replacements for T8 yet when these use controls. Moreover, especially in Eastern countries (which are heavily using T8 lamps) EU funding for energy efficiency has been used recently to install systems with conventional lighting solutions (including e.g. schools) and it would be inefficient to already push end-users to new investment for their replacement. It is also disputable whether LED retrofit solutions can comply with the legislation for light quality and safety in e.g. offices. PL would share an investigation made by Polish market surveillance authorities on 400 lights. While agreeing that removing T8 is very good ambition that needs to happen, **IALD** supported PL and asked to consider the economic impact when setting the phase-out date, especially for cases that would require changing the lighting system. Lighting control systems recently developed for T8, which are used in Southern and Eastern Europe, would not work well with LED retrofits. **DE** stated that suitable LED replacements are not available for all applications of LFL T8, e.g. in high ambient temperature, in chemically aggressive atmospheres or in applications that require overvoltage protection. DE added that they are analysing areas where the T8 phase out would create problems, according to feedback from German stakeholders; railways, street lighting, chemical atmospheres with high temperatures and those areas where turning machines are used (as they are impacted by the stroboscopic effect from LEDs). In response to other stakeholders DE stated that they do see major opportunities in terms of energy efficiency (especially in office spaces) and that in many cases there are suitable replacements for T8 lamps. DE stated that its position on LFL T8 was not yet final and referred to the written comments. **EEB** stated that the phase out of T8 is a unique opportunity to get rid of lamps containing mercury. **CLASP** supported the proposed phase out of T8 lamps and reported that today most of the new installations are with LED (e.g. the city of Paris has completely converted its metro stations and platforms to LED). CLASP underlined that 2020 is not an early date, because the last time that the EU laid down ecodesign requirement for T8 lamps was in 2010. With reference to the criticism that LED retrofits (which are directional lamps) cannot properly replace T8 lamps (which radiate light 360°), CLASP asked for feedback from LightingEurope in view of the fact that: 1. many members of LightingEurope already today produce LED retrofits of very good quality; 2. there are LEDs today that have double the lumen per watt than T8; and 3. companies like Philips had 68% of their revenue in the third quarter of 2017 from LED. **LightingEurope** confirmed the trend to use LED in new installations and to produce LED retrofits. However, as the phase out of T8 lamps is happening naturally, they consider it superfluous to regulate them and would leave the timing to the market. **AT** stressed that the phase out of T8 needs to be agreed now with a clear timing, as it would represent 90% of the energy savings.

Halogen phase out – LightingEurope suggested eliminating the phase out of halogen lamps like G4 and G9, because it would be a small portion of the energy

savings and could go against the principle of circular economy as regards luminaires using halogens that could not be refurbished anymore. As for R7s, LightingEurope asked to raise the limit to 5500 lumen. On the contrary, **SE** and **DK** strongly supported the phase out of halogens proposed by the Commission. If a second tier is added, **AT** suggested to phase out all R7s at that moment; **AT** also asked the Commission to verify that suitable LED replacements exist for G4 and G9 in September 2020. **DE** proposed for discussion the option to phase out luminaires with G9 and R7s sockets instead of phasing out the lamps.

Colour tuneable lighting – **CECED** asked to treat differently lighting used for illumination from lighting used for decorative purposes.

Separate control gear – **CECED** asked to keep in mind that there are applications where the control gear cannot be separated from the overall control board of the appliance and can thus not be measured to check the requirements.

Standby power consumption – **DK** recommended lower limits, supported by **TOPTEN** which proposed 0.2 for standby and 0.5 including network standby for light sources and 0.2 standby for control gears. **EEB** proposed 0.2 for standby, with the option to have it at the second tier if this is added.

2. Functional requirements

Flicker and temporary light artefacts – **UK** and **DK** asked for a more ambitious flicker requirement that would cover more than 50% of the population. **DE** and **SE** appreciated the flicker requirement and asked to address another temporary light artefact – the stroboscopic effect – by including at least an information requirement. **CLASP** and **ANEC/BEUC** supported the proposed requirement for flicker and adding the stroboscopic effect. **CLASP** suggested that in a possible tier 2 these two requirements could become more stringent and **ANEC/BEUC** asked to pay attention to modulation and frequency, and to define better test methods. **IT** and **LightingEurope** asked to remove the requirement for flicker.

The Commission Services replied that the proposed flicker requirement is based on an international standard which is used by Australia and USA and reminded that in 2013 the Commission issued a mandate to CEN-CENELEC to develop standards on flicker and stroboscopic effects but that there is no deliverable yet. According to the latest information, CEN-CENELEC will build the EN standard on the existing international standard (which also covers the stroboscopic effect).

Colour rendering index (CRI) – **AT**, **SE** and **DK** suggested expanding the CRI from R8 (with eight colours) to R9 (by adding red); **AT** asked to consider as well R14 or R99, with 14 and 99 colours respectively. **IALD** and **ANEC/BEUC** supported to use at least R9 (**ANEC/BEUC** reported that in a recent test they did with R9 and R14, many lamps failed R9). Regarding products with CRI < 80, **DE** considered it important to put on the light source packaging that such light source is not suitable for household/interior use.

Displacement factor – **DK** suggested keeping it at 0.5 for P between 5 and 25W, which is in line with CEN/CENELEC standards.

Colour consistency – **ANEC/BEUC** asked to reduce the steps of the MacAdam ellipse from six to two or three, reporting that today almost all light sources satisfy

this requirement; with fewer steps, the light quality of the products on the market would increase and this would help keeping the same light effect when replacing a lamp in multiple spotlights. **SE** suggested either setting four steps as an information requirement or applying the "u prime, v prime" method as it was proposed for measuring the white light area.

Lifetime requirement – **ANEC/BEUC**, **EEB** and **ECOS** asked to introduce a functional requirement on lifetime of LED, stating that is necessary to avoid poor quality LED on the market that would hinder the energy savings goals and put some control on self-declarations from producers. **ANEC/BEUC** stated that especially if the mandatory removability in article 4 is weakened, it would be necessary to inform customers on lifetime. **CLASP** asked to reconsider the introduction of a minimum lifetime requirement for LED without test which could be set at 15 000 hours. **AT** and **IT** stated to be against a lifetime requirement based on declaration only. **LightingEurope** agreed on the importance of a lifetime requirement but was against having a declared value because if this value is not true the lighting company is not legally liable and the whole exercise would be a loss of time for market surveillance authorities. **LightingEurope** prefers the approach to motivate its members to offer good products and make honest promises to consumers. On this point **AT**, based on their market surveillance experience, commented that at least for the domestic segment this is often not the case, especially for lumen maintenance and light quality. Together with **DE**, **AT** agreed that industry has enough information on the lifetime of their products and the legislation could require this information to be on the packaging.

SE and **DK** stated to be in favour of a lifetime requirement.

The discussion on the methods to measure lifetime continued under Annex V.

Functional requirements for separate control gears – **CLASP** asked to add a displacement factor and a minimum lifetime requirement.

Dimmable light sources and control gears – **CECAPI** asked to add a functional requirement for dimmable lighting products.

Power definition in Table 4 – **IT** asked to specify if it is P_{on} .

3. Information requirements

General comments – **LightingEurope** stated that the number of information requirements increased and asked to keep it at the level of today; they also asked for flexibility on the way that companies should provide information to market surveillance authorities.

Alignment with energy labelling – **NL** asked to ensure a good alignment with the energy labelling act and that no extra information requirement is imposed on companies. **UK** asked in particular to clarify that only one website would be fine for both acts.

Information on the packaging – **ANEC/BEUC** called for a verification system as regards what is declared on the packaging of lighting products.

Annex IV – Verification procedures for market surveillance authorities

Procedure – DK asked to specify the purpose of the verification of a single unit in (1) and to reconsider the sequence of the procedure, in particular the steps before the test, which comes only at (4) and which is run if the technical documentation is in order. **DE** supported this point asking to leave flexibility to market surveillance authorities on the order of the procedure (if, for example, they want to test the products before checking the documentation). The **Commission Services** asked for suggestions for improvement, bearing in mind that this procedure runs across all products regulations.

Number of units to be tested – UK, NL and IT opposed to test only three units of a product whose acquisition costs exceed 500 euro and asked to have always 10 units to test. **IT** welcomed the reduction from 20 to 10 units to be tested but asked the Commission if the relevance of the tolerance values was verified with the new number (e.g. with a Round Robin test). **BE** proposed to have three units to test in all cases. The **Commission Services** replied that they did not run a Round Robin test or similar check.

Tolerance ranges – SE commented that Table 6 is based on the verification tolerances used in Sweden and proposed the other Member States to discuss it and fine-tune it bilaterally. **LightingEurope** opposed the reduction of the sample units in combination with stricter tolerance ranges, stating that a smaller sample would require higher tolerances, in order to take into account among others the laboratory variability and the production variability. **SE** opposed to take into account production variability in the tolerances and **BE** suggested to add a recital to clarify that tolerance ranges are not meant to take account of production variability. **DK** asked to reconsider the fact to have separate tolerances for Power factor and for Useful luminous flux, because especially in the case of three unit sample, the tolerance would be high (10% + 10%) and could mean a jump of two energy labelling classes. **DE** stated that the tolerance range for the luminous flux is too narrow, asked for consistent wording in Table 6 (exceed, be less, deviate are used as synonymous) and to state that the determined value should prevail on the declared value. **AT** noted that the wording for parameters in Table 6, which as regards information requirements is worded more loosely than the other ecodesign requirements and asked to align it to the most stringent approach ("deviate").

Containing products – LightingEurope asked the Commission to confirm that "without permanent mechanical damage" applies to the light source and control gear versus the containing product, when the manufacturer/importer of a containing product is required to provide instructions to market surveillance authorities on how to dismount the lighting product. The Commission Services confirmed so.

"To be used by" date – for retail bulbs for households, **IALD** proposed to consider to have a date on the product packaging by when the light is guaranteed to keep a good lumen maintenance, as this could save work to market surveillance authorities.

Annex V – Functionality after accelerated endurance testing *(the discussion continued from Annex III on Lifetime)*

Reduction of testing time – LightingEurope welcomed the reduction of the 6000 h test to 1000 h, but would favour a 500 h test, to be combined with information requirements on the packaging and the promise of the manufacturer to the consumer. **AT** agreed to reduce the testing time but commented that for household products a test of 500 h is not enough to avoid products of bad quality on the

market. **CLASP** proposed two texts that would look at survival and lumen maintenance: the first is based on the EPA Energy Star method ISTMT (In-situ temperature measurement test) + LM80 report which takes two days and is used by industry to test L70. All LEDs manufactured today have an LM80 report, and so the only variable that needs to be established is the LED junction temperature under steady-state operation, which enables a calculation to determine the 70% lumen depreciation point. The second test is LM-84 that lasts 3000 hours. **DK, SE** and **NL** agreed with **LightingEurope** that the current 6000 h test is too long and a burden for market surveillance authorities, and would be in favour of exploring the shorter options that **CLASP** mentioned, even though **NL** would not favour tests longer than 1000 h. **DE** asked to keep the 6000 h test because their experience shows that in the first 3000 h of testing no lighting product fails. While agreeing that a test of 6000 h is indeed too long, **IALD** strongly opposed having short tests that could be too easily passed.

Three tests – LightingEurope criticised the complexity of having to do three tests and underlined that the best protection for consumers comes from market surveillance and simplicity is needed to facilitate market surveillance. **ANEC/BEUC** asked to clarify if the three tests of 1000 h each mean 3000 h in total, if the tests need to run in sequence and if 10 units per test are needed (for a total of 30 units). **NL** stated that 30 units would be too many. The **Commission Services** replied that the tests require 30 units but they are open to reconsider the whole structure of the tests.

Temperature cycling test (test (1)) – LightingEurope believed that very few market surveillance authorities have a climate chamber with the required temperature variation available. **CLASP** stated that it is an expensive test and proposed to remove it.

Switching cycle test (test (2)) – AT proposed to combine/integrate the switching cycle test (test (2)) with the life test (test (3)) because from their experience, at least for household lamps, the switching test alone is not useful. **CLASP** supported this and asked to verify in the wording if 1000 h refers to lifetime or to the switching cycle.

Accelerated operation life test (test (3)) – CLASP supported this test as a valuable tool to avoid loopholes for lamps that claim to be exempt for high temperature operation.

Annex VI – Benchmark

No comments.

5.2. Energy Labelling

Article 1 - Subject matter and scope

Luminaires – ANEC/BEUC and **TOPTEN** stated to be against the removal of the label for luminaires because consumers would miss information on the contained light source and its removability, which should be kept especially if the proposed article 4 on removability in the ecodesign text may be reconsidered. The **Commission Services** replied that the label would be discontinued but information

requirements on the light source apply as required in Annex V.3.2 and that if there would be any change to the proposed article 4 in ecodesign, the information requirements will be adapted accordingly in order to keep at least the same level of information on removability.

Article 2 – Definitions and Annex II – Definitions

Consistency with the definitions in ecodesign – IT reiterated their request to use the same wording for the same definitions in ecodesign.

Final owner – IT asked to delete this definition.

Light source – BE asked to confirm that the definition of light source in the ecodesign and energy labelling is the same. The **Commission Services** confirmed, adding that the exemptions are different.

Article 3 - Obligations of suppliers & Article 4 - Obligation of dealers

Suggestions for improvement – DE asked to double check the wording to avoid repetitions of the general obligations laid down in the framework regulation.

Sticker for relabelling – DE agreed with the Commission's proposal and stressed the importance of avoiding concurrent labels, in the spirit of the new framework regulation. On the contrary, **NL** and **IT** stated that applying a sticker to every product is not a feasible solution: as the framework regulation provides the opportunity to apply other solutions for those products that have the label printed on the packaging, they asked to consider as a compliant solution to not physically relabel every single product; **NL** stated that a good information campaign could be a solution. **IALD** stated that, while they see the difficulty to sticker every product, it is necessary to give consumers the right information, especially because lighting products stay on the market for very long (even up to ten years). **CLASP** observed a contradiction with what was said for lifetime (that a long test for lifetime does not make sense because products on the shelves have a quick turnover). **LightingEurope** confirmed that a new generation of LED is placed on the market every half year. **Independent Retail Europe** and **EuroCommerce** opposed stickers and proposed to have panels/signs on the shelves informing consumers on the rescaling for lamps. **LightingEurope** disagreed with the Commission's proposal.

Side for the label – IT asked to remove the obligation to have the label printed on the side that would face the consumer in the shop, because they find it confusing and a verification burden for surveillance authorities.

Label for business-to-business – LightingEurope asked to have the physical label only at final points of sale for business-to-business customers. The **Commission Services** confirmed that this is the intention.

Suppliers of containing products – NL and **CECED** asked to confirm that suppliers of containing products are not subject to the obligations laid down in article 3.1 but only to article 3.2. In addition **DK** asked to confirm that Annex V.4 on EPREL does not apply to containing products. The **Commission Services** confirmed on both points that this is the intention, reminding that only the information on the contained light source goes into the EPREL database and it is the responsibility of the manufacturer/importer of the lighting product to comply with

this. **IT** asked what happens if a containing product that is subject to EPREL (e.g. fridges for domestic use) changes the type of lamp: would the manufacturer/importer of the fridge need to update the technical documentation in EPREL just for the light? The **Commission Services** replied that this is true for all components of a fridge that would bring changes in the technical documentation.

Eco-lamps – **EEB** asked to retain the possibility that is in the current legislation to call a lamp "eco-lamp", but making the conditions more stringent.

Article 5 – Measurement methods

No comments.

Article 6 – Verification procedure for market surveillance purposes

No comments.

Article 7 – Revision

No comments.

Article 8 – Repeal

No comments.

Article 9 – Entry into force and application

Derogation to 30 days – **DE** stated to be against and asked to apply the standard 14 days laid down in the framework regulation. **Independent Retail Europe** and **EuroCommerce** stated instead that minimum six months would be needed and asked if 30 days are working days. **NL** shared the concerns of Independent Retail Europe and EuroCommerce.

Annex I – Exemptions

Range hoods – **CECED** requested to exempt range hoods, as these products already have a label for the contained light source.

Annex II – Definitions

See Article 2.

Annex III – Label for light sources

QR code – **IT** and **EEB** asked to make it clear that the QR should link to EPREL. **LightingEurope** asked not to make the QR code mandatory, as over time the link could be broken or the information moved elsewhere; moreover if the printed link links to EPREL it would not be appropriate for products that are sold also outside the EU. The **Commission Services** confirmed that the QR code would link to EPREL and acknowledged that products with that QR code could be sold outside the EU where the label is not mandatory. The Commission Services also clarified that the inclusion of a QR code cannot be on a voluntary base and stated that it is intended to be a useful tool for consumers.

Standby consumption – **TOPTEN** proposed to eliminate the consumption per 1000 h and to put instead the actual consumption, including the standby

consumption, and for the luminaire label (once it is decided to continue it), the control gear consumption. **DK** asked to include the standby consumption in the 1000 h value.

Label design – **DE** stated not to be happy with the proposed design and would share suggestions. **ANEC/BEUC** asked for information about the intention of the Commission to run a consumers' survey that would look into the label design and to be informed about the outcome. **The Commission Services** replied that they will share the terms of reference.

Annex IV – Energy efficiency classes and calculation method

Resulting classes – **IT** commented that today (not in September 2020) products would all be in classes G or F. **LightingEurope** considered classes A and B too ambitious. **TOPTEN** asked to add standby consumption in the calculation and to add an allowance for “low lumen-low voltage” bulbs, in order to discourage consumers buying high lumen bulbs just because these are in top classes. **CLASP** congratulated the Commission for the proposed classes, reminded that in 2017 a LED bulb with 200lm/W exists (the Dubai lamp) and supported **TOPTEN** on having standby consumption in the calculation.

Time perspective – **UK** suggested that a sales estimation after eight years and not after ten years would be more appropriate in view of the review planned after ten years, especially if top classes do not fill up as expected. The **Consultant** replied that estimations are based on data provided by industry and would not find it surprising if the opposite happens (that classes fill up quicker than estimated).

Correction factors – *see comments on correction factors made for Annex III of the ecodesign proposal.*

Annex V – Product information

Content of EPREL – **LightingEurope** asked that only information on energy labelling should be in EPREL and not on ecodesign, as EPREL is so far thought for labelling only. **EEB** stated that instead it would be a good occasion to have ecodesign and energy labelling information already in one system. The **Commission Services** clarified that the approach of the Commission is to align the requirements in the two texts to avoid duplication when it is the same information.

Luminaires in EPREL – **LightingEurope** requested to exempt luminaires from EPREL, as in the draft text it is proposed to discontinue the energy label for luminaires. The **Commission Services** stated that EPREL applies from 1 January 2019 which is before the proposed date to discontinue the label for luminaires (1 September 2020) and thus in principle luminaires are in scope of EPREL.

More than one lighting product in a containing product – **LightingEurope** asked to clarify if, in the case of a containing product such a luminaires with several light sources, the information for all light sources needs to be shown. The **Contractor** replied that making a list of the contained lighting products does not seem to be a big burden.

Information to be put on the packaging of a containing product – **LightingEurope** opposed to have on the packaging the sentence 3.2(b) about the

information on the contained light source, because it would need to be in 24 languages; it would be a burden especially for small packaging and for products containing more than one light source. **DE** suggested replacing the sentence with the arrow proposed for the front packaging. The **Commission Services** replied that they will look into this issue.

Small packaging – **BE** asked to remove the last sentence of 3.1 about placing a label in proximity to the packaging in case of small packaging, as this provision would only create confusion.

Annex VI – Information to be provided in the case of distance selling, except distance selling on the Internet

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Annex VII – Information to be provided in the case of distance selling through the Internet

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Annex IX – Displaying the energy class and the range of efficiency classes in visual advertisements and in promotional material

Image – **DE** said that they would send suggestions for the design. **CECED** asked to ensure consistency within all the ecodesign acts and use the same arrow. The **Commission Services** replied that this is the intention.

Annex VIII – Verification procedure for market surveillance authorities

See comments for Annex IV of the ecodesign proposal.

6. AOB

UK asked whether the Commission could already give information on the Ecodesign Consultation Forum meetings that will be held in the first quarter of 2018.

The **Commission Services** replied that there might be a meeting on computers. For EPREL, meetings for each of the three main user groups (i.e. suppliers, market surveillance authorities and public) are scheduled for March 2018.

IT asked the Commission to provide a schedule in one table of all meetings until mid-2018 at one of the next meetings in December 2017. **ECOS** extended the requests for the meetings for preparatory studies.

The **Commission Services** will give indicative information but no dates.

LightingEurope asked information about the open public consultation that the Commission would run according to the Better Regulation procedure.

The **Commission Services** explained the procedure and specified that the consultation would cover all product groups under revision.

IALD asked about the work on lighting systems.

The **Commission Services** replied that it is not their intention to work on lighting systems before the ongoing review for lighting products is concluded.

Comments to the working documents are due by 26 January 2018.

ANNEX – Attendance List

Commission Services	
DG ENER	C.3
DG ENV	B.1

EU Member States	
AT	Austrian Energy Agency
BE	FPS Economy, SME, Selfemployed and Energy
BG	Permanent representation to the EU
CZ	State Energy Inspection Authority
	Ministry of Industry and Trade
DE	Federal Environment Agency
	Federal Institute for Materials Research and Testing
	Federal Ministry for Economic Affairs and Energy
	Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
	Bavarian State Ministry for Environment and Consumer Protection
	Baden Württemberg Ministry of Environment, Climate Protection and the Energy Sector
DK	Danish Energy Agency
EE	Estonian Ministry of Economic Affairs and Communications
FI	Energy Authority
FR	Ministère de l'énergie et du développement durable
IE	Enterprise Ireland, Competitiveness
IT	ENEA
NL	Netherlands Enterprise Agency
PL	Ministry of Energy
SE	Swedish Energy Agency
UK	Department for Business, Energy & Industrial Strategy, Sustainable Energy using Products team, Home and Local Energy
	Department of Energy and Climate Change
EEA countries	
CH	Swiss Federal Office of Energy
NO	Norwegian Water Resources and Energy Directorate

Organisations	
AIE	EIM
ANEC/ BEUC	EucoLight
CECAPI	EuRIC
CECED	EuroCommerce
CEN/TC 169	IALD
CER	Independent Retail Europe
CLASP	LightingEurope
ECOS	ORGALIME
EEB	TOPTEN
EFIC	VHK