



**European Commission
DG Environment**

STATUS AND PERSPECTIVES OF THE RoHS DIRECTIVE

EUROPEAN POLICIES IMPACTING THE LIGHTING MARKET

Frankfurt, 20 March 2018

Introduction to the RoHS Directive

- **RoHS - Restriction of Hazardous Substances**
- Prevention objective: Supporting the adequate treatment of WEEE by restricting the use of certain hazardous substances in **electrical and electronic equipment (EEE)** placed on the EU market
- RoHS 1 entered into force 2003; RoHS 2 2011/65/EU (recast of RoHS 1) in force since 2011; Directive amending RoHS 2 (Scope Review) adopted in November 2017

Introduction to the RoHS Directive

- Restricted substances (Annex II):
 - **certain heavy metals:** lead, mercury, cadmium, and hexavalent chromium
 - **certain flame retardants:** polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE)
 - **certain phthalates** (applicable from July 2019): Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)

Introduction to the RoHS Directive

- „Open scope“- applies to electrical and electronic equipment (EEE) in categories 1 – 10 as specified in Annex I, lighting equipment falling under category 5
- From 22 July 2019, category 11 enters into scope: RoHS will be **applicable to all EEE**, with the exception of equipment explicitly excluded
- Strong links to other EU legislation on waste, chemicals and product design (Waste Framework Directive, WEEE, ELV, REACH, Ecodesign)

RoHS Directive - Exemptions

- 'Continuous' adaption to technical and scientific progress:
 - Time-limited exemptions can be granted for specific applications (Annexes III and IV)
- 37 currently valid exemptions in Annex III, of which 14 exemptions specific to lighting applications (mercury and lead)
- 42 currently valid exemptions in Annex IV (specific to medical devices and monitoring and control instruments)

Exemption (or request for new exemption)	Original expiry date	Validity status
Mercury in Single capped (compact) fluorescent lamps		
Annex III n. 1(a-e)	21/07/2016	Valid - requested for renewal
Annex III n. 1(f)	21/07/2016	Valid - requested for renewal
Annex III n. 1(g)	31/12/2017	Valid - requested for renewal
Mercury in Double-capped linear fluorescent lamps for general lighting purposes		
Annex III n. 2(a)(1-5)	21/07/2016	Valid - requested for renewal
Mercury in Other fluorescent lamps		
Annex III n. 2(b)(3)	21/07/2016	Valid - requested for renewal
Annex III n. 2(b)(4)	21/07/2016	Valid - requested for renewal
Mercury in Cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for special purposes		
Annex III n. 3(a-c)	21/07/2016	Valid - requested for renewal
Mercury in Other low pressure discharge lamps		
Annex III n. 4(a)	21/07/2016	Valid - requested for renewal
Mercury in High pressure sodium lamps for general lighting purposes		
Annex III n. 4(b)(I-III)	21/07/2016	Valid - requested for renewal
Annex III n. 4(c)(I-III)	21/07/2016	Valid - requested for renewal
Mercury in Metal halide lamps		
Annex III n. 4(e)	21/07/2016	Valid - requested for renewal
Mercury in Other discharge lamps for special purposes		
Annex III n. 4(f)	21/07/2016	Valid - requested for renewal
Mercury in Hand crafted discharge tubes for signs/light-artwork		
Annex III n. 4(g)	31/12/2018	Valid - no longer renewable
Lead in fluorescent tubes		
Annex III n. 5(b)	21/07/2016	Valid - requested for renewal
Lead as activator in fluorescent powder of sun tanning lamps		
Annex III n. 18(b)	21/07/2016	Valid - requested for renewal
Lead and cadmium used for inks for marking lamp glass		
Annex III n. 21	21/07/2016	Valid - requested for renewal
Cadmium in colour converting LEDs/quantum dots		
Annex III n. 39	20/11/2018	Valid - no longer renewable
Annex III n. 39(a)	31/10/2019	Decided - not yet applied
Request for Cd in QDs	N/A	Study to be completed in 06/2019

RoHS Directive - Exemptions

- Conditions for granting exemptions (Article 5(1)):
 - Inclusion does not weaken protection under REACH;
 - Substitute does not exist or existing substitutes are not reliable; or
 - Their overall environmental, health and consumer safety impact outweighs the benefits of substitution;
 - Socio-economic impact and impact on innovation also to consider
- Application for granting, renewing or revoking an exemption possible: decisions taken via delegated acts
- Renewal requests: if renewal rejected or scope partially amended, transition period for newly not covered applications of min 12 – max 18 months granted



RoHS Directive - Exemptions

- Delegated acts - decision process:
 - Preparation/adoption by the Commission
 - scientific study incl. consultations with stakeholders
 - consultations with Member States
 - Commission Interservice consultations
 - public feedback and WTO TBT notification
 - Scrutiny with right of objection by EP/Council:
 - 2 months after adoption by the Commission
 - Publication in the Official Journal
- Current status available on Commission RoHS website (http://ec.europa.eu/environment/waste/rohs_eee/adaptation_en.htm) and Interinstitutional Register of Delegated Acts

RoHS Directive – Substance Review

- Study to support review of the list of restricted substances launched in January 2018, as per Article 6 of RoHS Directive
- Objectives:
 - update of the existing methodology for identifying and assessing substances for possible restriction;
 - update of the substance inventory;
 - in-depth assessment of seven substances identified in previous studies for possible future restriction;
 - methodology for exemption evaluation and a request for a new exemption for cadmium quantum dots in lighting applications

RoHS Directive – General Review 2021

- General review by July 2021; accompanied by a legislative proposal **if appropriate**
- Steps in course of 2018: publication of a roadmap, launch of first preparatory studies
- Elements for the review / „evaluation“
 - effectiveness and efficiency of the RoHS Directive, incl. current exemption system
 - in-depth assessment of the synergies and consistency with relevant EU legislation and Commission initiatives
 - circular economy perspective

Let's turn Europe into a
more circular economy



Thank you!

European Commission
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