Proposal to update ECE/TRANS/WP.29/GRE/2009/32

The text reproduced below was prepared jointly by the experts from Working Party "Brussels 1952" (GTB) regarding the internal process of GTB for introduction and evaluation of new light source categories. It is intended to replace ECE/TRANS/WP.29/GRE/2009/32, which is included in the “Documents for reference only” section of the GRE website.
GTB INTERNAL PROCESS
FOR INTRODUCTION AND EVALUATION OF NEW LIGHT SOURCE CATEGORIES

I. INTRODUCTION

1. At its fifty-seventh session, GRE adopted ECE/TRANS/WP.29/GRE/2007/17, as draft Supplement 29 to the 03 series of amendments to Regulation No. 37 that was finally adopted by WP.29 at its June 2007 session (ECE/TRANS/WP.29/2007/54), which covered a new system of restrictions. The essence of this proposal was to group categories of light sources in accordance with their suitability for use in lighting devices and to reduce the numbers of footnotes indicating use restrictions. GTB would prepare further amendments and transitional provisions, if needed.

II. STATUS

2. In the meantime GTB has developed an internal procedure for proposing new light source categories and a supporting tool of criteria for evaluation of the suitability of light sources for lighting devices. All of this is described in a package of documents consisting of:

(a) The general overview (this document);
(b) A flow chart describing the GTB process (Annex 1);
(c) A description to the flow chart: “Recommended practice for the introduction of new ECE light source categories” (Annex 2);
(d) The "criteria tool", in the form of a table completed with reference data (Annex 3);
(e) A usage manual for the criteria tool (Annex 4);
(f) A form to be completed with new proposals to be able to maintain the reference data (Annex 5).

III. THE WAY FORWARD

3. As a conclusion from the discussion on grouping of categories filament lamps and the discussion on the application of the criteria tool for evaluating suitability of light source categories for lighting devices, GTB considered also a general review of the purpose and scope of Regulation No. 37. The following questions were addressed:

(a) Is Regulation No. 37 a reference book for filament light source categories complying with minimum requirements necessary for traffic safety or a list of selected light source categories complying with the highest standards/state-of-the-art technology?
(b) What are the specific/objective and general criteria for incorporation in Regulation No. 37, to be applied to all new/existing light source categories?

4. The outcome of this discussion was:

(a) Regulations Nos. 37, 99 and the new draft Regulation for LED light sources (WP.29/2010/44 and WP.29/2010/44/Corr.1) should preferably list selected light source categories.
(b) Such categories should be:
   • Complying with state-of-the-art technology as defined in the signatory countries to these light source regulations and enabling improvement of (traffic) safety;
   • Complying not only with the regular requirements concerning photometric, electrical and dimensional characteristics, but also taking into account other aspects as formulated in general terms by WP.29 concerning, environmental protection, energy efficiency and the need to reduce diversity in order to facilitate global commerce in these products;
   • Specified taking into account aspects from other relevant standards like on vibration and electrical and mechanical keying from IEC.
(c) Regulations Nos. 37, 99 and the new draft Regulation for LED light sources (WP.29/2010/44 and WP.29/2010/44/Corr.1) should be regularly reviewed whether there is still a need for all specified light source categories. Proposals for phasing out light source categories with longer or shorter transitional provisions might be considered.

(d) Performance requirements for LED light sources should be developed for IEC60810.

IV. INFORMATION

5. The evaluation criteria that are applied to filament lamps of normal production as specified by the data sheets are listed as follows:

1. Values of:
   (a) The objective luminous flux with tolerances
   (b) The filament length and diameter with tolerances
   (c) The filament position with tolerances
   (c) A single accuracy parameter, calculated from the tolerances of the filament dimension and position.

2. Avoidance of stray light images by:
   (a) The specification of the distortion free area
   (b) The specification of the metal free zone
   (c) The displacement of the bulb-axis vs. filament axis (only possible for axial filaments)
   (d) The specification of a possible opaque top.

3. Year of introduction:
   (More precise: by the year of enforcement of the amendment to Regulation No. 37 introducing the new light source category).

4. Use restrictions, if any, on top of the grouping of light source categories.
IV. ANNEXES

(1) A flow chart describing the GTB process;

(2) A description to the flow chart: "Recommended practice for the introduction of new ECE light source categories”;

(3) The "criteria tool”, in the form of a table completed with reference data; update April 2011;

(4) A usage manual for the criteria tool;

(5) A form to be completed with new proposals to be able to maintain the reference data.