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Working Party on Lighting and Light-Signalling (GRE) (Fifty-second session, 30 March - 2 April 2004, agenda item 3.)

# DRAFT SUPPLEMENT 25 TO THE 03 SERIES OF AMENDMENTS) TO REGULATION No. 37

(Filament lamps)

Transmitted by the expert from Germany

<u>Note</u>: The text reproduced below was prepared by the expert from Germany, in order to clarify the situation of the conformity of production (COP) procedure in relation to "Colour Endurance Test" as introduced into Regulation No. 37 by document TRANS/WP.29/935. The modifications are marked in **bold** characters.

Note: This document is distributed to the Experts on Lighting and Light-Signalling only.

# A. PROPOSAL

Annex 7, amend to read:

#### "<u>Annex 7</u>

#### SAMPLING AND COMPLIANCE LEVELS FOR MANUFACTURER TEST RECORDS

Grouping of characteristics	Grouping <u>*</u> / of test records between lamp types	Minimum 12 monthly sample per grouping <u>*</u> /	Acceptable level of non-compliance per grouping of characteristics (%)
Marking, legibility and durability	All types with the same external dimensions	315	1
Bulb quality	All types with the same bulb	315	1
Colour of the bulb	All coloured bulbs of the same design	315	
External lamp dimensions (excluding cap/base)	All types of the same category	200	1
Dimensions of caps and bases	All types of the same category	200	6.5
Dimensions related to internal elements <u>**</u> /	All lamps of one type	200	6.5
Initial readings, watts and lumens <u>**</u> /	All lamps of one type	200	1
Colour endurance test	All coated lamps of one coating technology	20 <u>***</u> /	1

#### Table 1 - Characteristics

 $\underline{*}$ / The assessment shall in general cover series production filament lamps from individual factories. A manufacturer may group together records concerning the same type from several factories, provided these operate under the same quality system and quality management.

 $\underline{**}/$  In case a filament lamp has more than one inner element (filament, shield) the grouping of characteristics (dimensions, watts, lumens) applies to each element separately.

 $\frac{***}{}$  Representative distribution over categories, worst case, meaning a group of coated lamps using the same technology within the categories with the toughest conditions for the coating."

\* \* \*

## **B.** JUSTIFICATION

According to document TRANS/WP.29/935

#### "DRAFT SUPPLEMENT 23 TO THE 03 SERIES OF AMENDMENTS TO REGULATION No. 37"

the colour endurance test for lamps with coated bulbs is introduced as a mandatory requirement and will enter into force in the first quarter of 2004.

The relevant amendment is:

"Paragraph 3.6.3., amend to read:

"...... a point of choice on the Planckian locus (IEC Publication 15.2 Colorimetry, 1986). Filament lamps for use in light signalling devices shall meet the requirements as specified in paragraph 2.4.2 of IEC Publication 60809, Amendment 3 to Edition 2."

This test duration in total is 14 days. Therefore the application of the same COP requirements for colour measurements of lamps in general (see Table 1 of annex 7) is unjustified and expensive.

Consequently specific COP conditions are necessary, as proposed in the last line of Table 1 in annex 7 to Regulation No. 37.

The minimum twelve monthly sample and grouping per 20 lamps are proposed in order to ensure statistical significance at 1 per cent level.

"Worst case" means, that within a grouping of coated lamps using the same technology, the categories with the toughest conditions for the coating should be tested.

In the opinion of the experts from Germany, this proposal seems to be an acceptable practical way to solve this problem.