UNITED NATIONS **E**

Economic and Social Council

Distr.
GENERAL

ECE/TRANS/WP.29/GRE/2008/19
18 January 2008

Original: ENGLISH
ENGLISH AND FRENCH ONLY

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations

Working Party on Lighting and Light-Signalling

Fifty-ninth session
Geneva, 31 March - 4 April 2008
Item 3(a) of the provisional agenda

REGULATION No. 37
(Filament lamps)

Proposal for Supplement 32 to the 03 series of amendments to Regulation No. 37 */

Submitted by the expert from the Working Party "Brussels 1952" (GTB)

The text reproduced below was prepared by the expert from GTB in order to introduce into Regulation No. 37 the provisions for new categories of filament light sources PC16W, PCY16W and PCR16W. The proposal is based on the current text of the Regulation including Supplement 30 to the 03 series of amendments. The modifications to the existing text of the Regulation are marked in **bold** characters.

*/ In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance performance of vehicles. The present document is submitted in conformity with that mandate.

A. PROPOSAL

Annex 1

The list of categories of filament lamps, grouped, and their sheet numbers, amend to read:

"

Group 2:
Only for use in signalling lamps, cornering lamps, reversing lamps and rear registration plate lamps:

Category	Sheet number(s)
C5W	C5W/1
...	
P27/7W	P27/7W/1 to 3
PC16W	**PC16W/1 to 3**
PCR16W	**PC16W/1 to 3**
PCY16W	**PC16W/1 to 3**
PR19W	P19W/1 to 3

…"

The list of sheets for filament lamps and their sequence, amend to read:

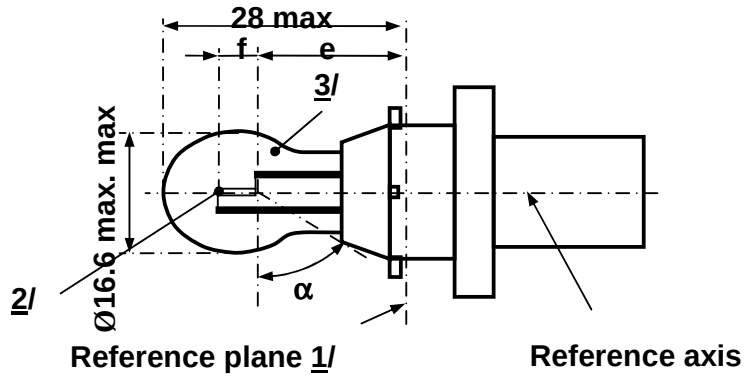
"

Sheet number(s)
…
P27/7W/1 to 3
PC16W/1 to 3
P19W/1 to 3
…"

Insert new sheets PC16W/1 to 3, between sheet P27/7W/3 and sheet PR21W/1, to read:
"

CATEGORIES PC16W, PCY16W AND PCR16W Sheet PC16W/1

The drawings are intended only to illustrate the essential dimensions (in mm) of the filament lamp



1/ The reference plane is defined by the meeting points of the cap-holder fit.
2/ No actual filament diameter restrictions apply but the objective is d max. = 1.1 mm.
3/ The light emitted from normal production lamps shall be white for category PC16W; amber for category PCY16W; red for category PCR16W. (see also note 7/).

CATEGORIES PC16W, PCY16W AND PCR16W Sheet PC16W/2

Dimensions in mm			Filament lamps of normal production			Standard filament lamp
			min.	nom.	max.	7/
e	4/ 5/			18.5		18.5
f	4/ 5/			4.0		4.0 ± 0.2
α	6/		54°			54° min.
PC16W Cap PU20d-1 PCY16W Cap PU20d-2 PCR16W Cap PU20d-7			in accordance with IEC Publication 60061 (sheet 7004-[…]-1)			
ELECTRICAL AND PHOTOMETRIC CHARACTERISTICS						
Rated values	Volts		12			12
	Watts		16			16
Test voltage	Volts		13.5			13.5
Objective values	Watts		17 max.			17 max.
	Luminous flux	PC16W	300 ± 15 per cent			
		PCY16W	180 ± 20 per cent			
		PCR16W	70 ± 20 per cent			
Reference luminous flux at approximately			13.5 V			White: 300 lm Amber: 180 lm Red: 70 lm

4/ The filament position is checked by means of a "Box-System"; sheet PC16W/3.

5/ The ends of the filament are defined as the points where, when the viewing direction is perpendicular to the plane through the filament lead-in wires as showed in the drawing on sheet PC16W/1, the projection of the outside of the end turns crosses the filament axis.

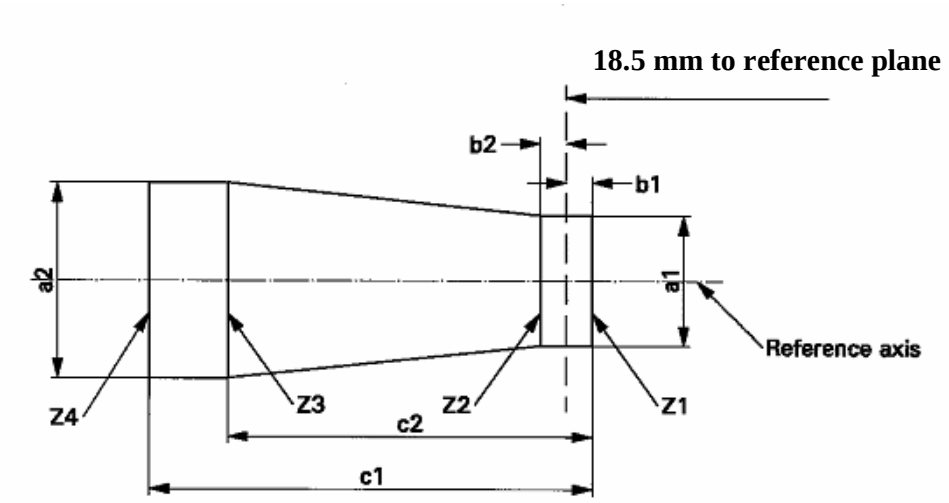
6/ No part of the cap beyond the reference plane shall interfere with angle α. The bulb shall be optically distortion free within the angle 2α + 180°.

7/ The light emitted from standard filament lamps shall be white for category PC16W; white or amber for category PCY16W; white or red for category PCR16W.

CATEGORIES PC16W, PCY16W AND PCR16W Sheet PC16W/3

Screen projection requirements

This test is used to determine, by checking whether the filament is correctly positioned relative to the reference axis and reference plane, whether a filament lamp complies with the requirements.



	a1	a2	b1, b2	c1	c2
Filament lamps of normal production	2.9	3.9	0.5	5.2	3.8
Standard filament lamps	1.5	1.7	0.25	4.7	3.8

The filament position is checked in two mutually perpendicular planes, one of them being the plane through the lead-in wires.
The ends of the filament as defined on sheet PC16W/2, note 5/, shall lie between Z1 and Z2 and between the lines Z3 and Z4.
The filament shall lie entirely within the limits shown."

B. JUSTIFICATION

This proposal is intended to introduce into Regulation No. 37 new 16W light source categories for signalling lamps. These categories have been developed for a longer lifetime than similar 19- and 24-watt categories already defined in this Regulation. White and amber versions are currently in the market as a non-replaceable light source or as part of light source modules. A simple, sealed cap with the necessary keying facilities, slightly deviating from those that are already on the market, is proposed to the International Electrotechnical Commission (IEC) for standardization. The major advantage of the new cap is a smaller diameter which, in practical use, should result in easier mounting and a simpler geometry.

- - - - -