

**PROPOSAL FOR DRAFT AMENDMENT TO REGULATION No. 43**  
(Safety glazing)

Transmitted by the Expert from the European Community 1/

Note: The text reproduced below was prepared by the expert from the European, Community in order to include provisions allowing proper identification of darkened safety glazing situated behind a plane passing through the driver's R point. This amendment is based on the text of Regulation No 43 as amended by corrigendum 2 to Supplement 4 (TRANS/WP.29/848).

**A. PROPOSAL**

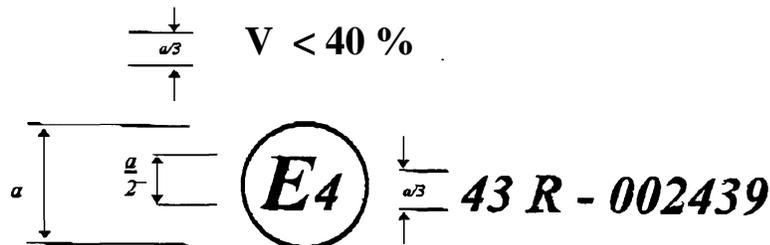
1. Paragraph 5.5.2., amend to read:

"5.5.2. V in the case of glazing which has a regular light transmittance of less than 70 per cent

V, followed by the additional symbol < 40 %, in the case of glazing which has a regular light transmittance of less than 40 per cent"

2. Annex 2A, 'ARRANGEMENT OF APPROVAL MARKS FOR COMPONENTS', add after the approval mark a new example for safety glazing having a regular light transmittance < 70 per cent, to read:

"Safety glazing having a regular light transmittance < 40 per cent



*a = 8 mm min.*

The above approval mark affixed to a safety glazing with a regular light transmittance of less than 40 per cent as determined by the test described in annex 3, paragraph 9.1, shows that the component concerned has been approved in the Netherlands (E 4) pursuant to Regulation No 43 in its original form under approval No. 002439. The approval number indicates that the approval was granted in accordance with the requirements of Regulation No 43"

## B. JUSTIFICATION

### 1. Introduction

During the 82<sup>nd</sup> session of the GRSG, a proposal for an Annex 21 - provisions regarding the installation of safety glazing on vehicles - has been discussed.

With respect to regular light transmittance, it might be required, in the future :

- 70 % for the safety glazing situated in front of a plane passing through the driver's R point , except for the windscreen;
- 70 % or less for the safety glazing situated behind a plane passing through the driver's R point, respectively :
  - 70 %, when the vehicle is fitted with one exterior rear-view mirror
  - no minimum limit, when the vehicle is fitted with two exterior rear-view mirrors;

### 2. Community legislation

Commission Directive 2001/92/EC, amending Council Directive 92/22/EEC refers explicitly to the provisions of the most recent version of Regulation 43 adopted by the European Community. Directive 2001/92/EC is part of the type-approval requirements in respect of EC type-approval of vehicles belonging to the category M<sub>1</sub>.

With regard to other categories of vehicles, Directive 2001/92/EC is 'optional'. That means that Member States may have national legislation in the area of glazing installation.

Insofar as some Member States would not accept (very) darkened glazing at certain locations - as is currently the case with Directive 92/22/EEC. There is some benefit that such glazing be properly marked to make it easily identifiable.

### 3. Limit value

A number of authors have demonstrated that *"tinting reduces detection rates and increases detection distance 2/".* Recently, a report prepared by ICE Ergonomics Ltd for the UK Government recommends that *"the minimum level of luminous transmission could be reduced from 50% to 33.4 % before there is any significant decrement to detection distance"*.

It is proposed to require a specific marking only when regular light transmittance is less than 40 % (40 % as a mean value between 50 and 33.4 %).

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2/ PPAD 9/3/39 - Quality and field of vision ICE Ergonomics Ltd,  
Feb 2002, p.29