CLEPA comments on TRANS/WP.29/GRSG/1999/12/Rev1

Proposal

Paragraph 2.18.2, amend to read:
"Other safety glazing requisite for driver visibility means all glazing in the rearward field of view of the driver, when the vehicle is equipped with one interior mirror and only one exterior rear view mirror."

Paragraph 5.5.2, amend to read:
"V in the case of a glazing other than a windscreen covered by the provisions of paragraph 9.1.4.2 in Annex 3."
(i.e. as currently in supplement 4)

Annex 2A, the first example is to be deleted.
(if there is no lower limit specified it is not needed)

Annex 21, Paragraph 4.2.1.2, amend to read:
" … as defined in paragraphs 5.5.5 and 5.5.7 of this regulation;"

Annex 21, Paragraph 4.2.2, amend to read:
"Other safety glazing requisite for driver visibility"

Annex 21, Paragraph 4.2.2.1, amend to read:
"The safety glazing defined in paragraph 2.18.2 of this regulation must have a light transmittance of at least 70%;"

Annex 21, Paragraph 4.2.2.2 (old), to be deleted

Annex 21, Paragraph 4.2.2.3 (old), amend to read:
"Plastic panes of safety glazing shall bear the additional symbols, as defined in paragraph 5.5.5 and paragraph 5.5.7 of this regulation."

Annex 21, Paragraph 4.2.3.1 (old), amend to read:
"The safety glazings not covered by the definitions 2.18.1 and 2.18.2 of this regulation shall bear the additional symbol specified in paragraph 5.5.2 of this regulation."

Annex 21, Paragraphs 4.2.3.2.1, 4.2.3.3 and 4.2.4, to be deleted.
(since they are covered by paragraph 4.2.3.1.)

Annex 21, insert a new Paragraph 4.2.3.2, to read:
"In the case of plastic glazings the provisions of paragraph 4.2.1.2 and paragraph 4.2.2.2 *(note: the new paragraph 4.2.2.2 is meant)* of this annex do not apply for the following vehicles and glazing locations:
(a) Motor caravans
(b) Trailers including caravans
(c) Sunroofs"

Annex 21, Paragraph 4.3.2 (old), to be deleted.

Rationale

This latest document from the UK and Belgium includes a proposal to introduce a minimum light transmission limit for glazing located to the rear of the driver. Currently, in all countries applying ECE R 43, the practice is to grant approval and allow the use of darker glazing behind the B-pillar with no lower limit on light transmission provided that the rearward field of view requirements specified in ECE R 46 are satisfied using two exterior side mirrors.

In the proposal no evidence, such as accident data, has been cited to justify the need to introduce a minimum light transmission limit of [30%] for these glazings.

The European glass industry has developed a range of darker glasses in response to the demand of motor vehicle manufacturers for glazings with:

- improved solar control performance,
- reduced UV light transmission.

The solar control performance of the glazing is a significant factor in meeting the air-conditioning needs for many motor vehicles, particularly in relation to the power requirements. There is also a growing awareness of the damage caused by UV radiation to human skin and its effect on trim degradation.

The adoption of a [30%] lower limit would restrict the benefits offered by darker solar control glazing. CLEPA has already submitted in TRANS/WP.29/GRSG/2000/24 its comments on the earlier UK proposal TRANS/WP.29/GRSG/1999/12 and expressed its concerns when the document was briefly discussed at the 78th session of GRSG in April 2000.
Following discussion with OICA, CLEPA proposes the above changes to the UK/Belgium document 12/Rev1.

Addendum (for information):
The relationship between Light Transmission and Solar Control Performance

The graph below shows how the solar control performance of heat absorbing glass improves as the light transmission is reduced. In the graph:

Direct Solar Heat Transmission – is the percentage of the sun's energy, which passes directly to the vehicle interior.

Total Solar Heat Transmission – is the sum of the direct transmission and a portion of the heat absorbed by the glass which is re-radiated to the vehicle interior.

UV Transmission – is the percentage of solar energy transmitted in the UV range 230-380 mm.