UNITED NATIONS



# **Economic and Social Council**

Distr.

RESTRICTED

TRANS/WP.29/GRSG/2003/11 24 February 2003

Original: ENGLISH

ENGLISH AND FRENCH ONLY

### **ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on General Safety Provisions (GRSG) (Eighty-fourth session, 5-9 May 2003, agenda item 11.5.)

## PROPOSAL FOR A DRAFT SUPPLEMENT 2 TO THE 02 SERIES OF AMENDMENTS TO REGULATION No. 26

(Vehicles with regard to their external projections)

Transmitted by the Expert from the Netherlands

<u>Note</u>: The text reproduced below was prepared by the expert from the Netherlands in order to adapt the requirements for aerials to technical progress.

Note: This document is distributed to the Experts on General Safety Provisions only.

### A. PROPOSAL

Paragraph 6.17.4., amend to read:

"6.17.4. The bases of aerials shall not project more than 30 mm when determined according to the procedure of annex 3, paragraph 2. However, in the case of aerials with amplifiers built into the base, these bases may project up to 40 mm.

In cases where by the absence of a flexible shaft or part it is not possible to identify what the base is of an aerial this requirement is deemed to be met if, after a horizontal force of not more than 50 daN in forward and rearward direction is applied by a flat-ended ram of not more than 50 mm diameter at the most salient part of the aerial:

- (a) the aerial bends towards the support and does not project more than 30 mm or 40 mm in case an amplifier is installed in the aerial or
- (b) the aerial breaks off and the remaining part of the aerial does not show any sharp or dangerous part that can be contacted by the 100 mm sphere and does not project more than 30 mm or 40 mm in case an amplifier is installed in the remaining part of the aerial at the outside of the vehicle."

\* \* \*

### B. JUSTIFICATION

At the time that the requirement of paragraph 6.17.4. for the aerials in Regulation No. 26 (vehicles with regard to their external projections) was developed only one type of aerial was used. For this type it was easy to identify the base of the aerial.

Currently many aerials are used where it is not clear what the base is (for example "shark's fin aerials") and it appears that this has resulted in different interpretations ranging from regarding the complete aerial as the base to not applying this requirement at all.

For achieving an improvement of this paragraph, it is useful to bear in mind what the intention is of this requirement: minimizing the risk and the severity of injury when the vehicle contacts other road users.

To minimize the risk of injury, the aerial must not be too strong when contacted by another road user and in case where the complete aerial is a rigid construction without a flexible shaft, the requirement of paragraph 6.17.4. can be considered to be fulfilled if, after a push test with a horizontal force of 50 daN exercised in forward and rearward direction at the most salient point of the aerial, the aerial bends or breaks off and the remaining part is not projecting more than 30 respectively 40 mm and does not show any dangerous sharp edges. Moreover, all edges of the rigid parts of the aerial must be rounded with a radius of curvature not less than 2.5 mm where contactable by a sphere of 100 mm diameter."