Proposal from Japan to review the requirements for forward field of vision in Regulation No. 125

## 1. Background

Japan made proposals in TRANS/WP29/GRSG/2002/9 with regard to the tightening of the requirements concerning the direct forward field of vision under Regulation No.125. To the Japan's proposals, India made comments on the direction of study of the requirements. Japan and India have agreed to examine the future direction and to make proposals again at GRSG.
2. Items to be discussed
(1) Japan's proposal

The current version of Regulation No. 125 specifies requirements regarding the forward field of vision; however, it does not identify the relationship between the field of vision of the driver and the vehicle’s height above the ground. This virtually allows the existence of passenger cars and passenger car-based motor trucks which are so structured that two-wheeled vehicles in the driving direction are outside of the field of vision of the drivers of such cars and trucks. Therefore, additional requirements should be considered immediately in terms of accident prevention.

Japan had already implemented regulations from this point of view, and therefore made proposals, considering that the amendment of Regulation No. 125 based on Japan's provisions would be effective.
(2) India's proposal

India has asked Japan to explain the adequacy of the size of and distance to an obstruction. India has also raised concerns about the requirements concerning the direct field of vision as a whole from the following three points of view:
(1) Scope of the forward field of vision;
(2) Expansion of the categories of vehicles; and
(3) Coordination with the indirect field of vision.
3. Proposals on the Future Direction

In order to proceed with the review effectively, we propose that the requirements concerning the direct field of vision be reviewed through the following three steps. Japan will submit a formal document on Step 1 at the next GRSG session.

- Step 1 (immediate measures):

Based on the current provisions applicable to passenger cars, tighten the requirement for the driving direction, which is the most important factor, according to proposals in line with the Japan's provisions. Add the category of passenger car-based motor trucks to the categories subject to the requirements. Justifications asked by India to the size of and distance to an obstruction under the requirements for the field of vision are explained in the attachment.

- Step 2 (medium-term study):

Study the need of requirements concerning the direct field of vision for heavy vehicles.

- Step 3 (long-term study):

Study the need of additional requirements concerning the direct field of vision for directions other than the driving direction, while coordinating with the requirements for the indirect field of vision.

## (Attachment)

Japan's regulations specify the size of and distance to an obstruction as follows on the assumption that a two-wheeled vehicle is being driven immediately in front of the vehicle (figure 1). This is based on the idea that a two-wheeled vehicle, the smallest possible vehicle that may exist in the driving direction of a running vehicle, should be visible in the direct forward field of vision of drivers of passenger cars and motor trucks with a gross vehicle weight of 3.5 tons or below.


Figure 1. Basis for the Requirement Concerning the Field of Vision under the Japan’s Provisions

In order to add this requirement to the current Regulation No.125, the wording of the additional requirement is being examined as follows (after examination, requirement proposals will be submitted as a working document at the next session. See Figure 2).

In paragraph 5.1.3, "...one being perpendicular to the plane $\mathrm{X}-\mathrm{Z}$ and declining forward 4 degrees below the horizontal..." should be amended as "...one being perpendicular to the plane $\mathrm{X}-\mathrm{Z}$ and declining forward 4 degrees below the horizontal (or if the angle below the horizontal between the plane being perpendicular to the plane $\mathrm{X}-\mathrm{Z}$, and passing through the point V 2 and the straight line perpendicular to the plane $\mathrm{X}-\mathrm{Z}$ at a distance of 2.3 m from the front of the vehicle and at a height of 1 m above the ground, and the horizontal exceeds 4 degrees, this plane (see Figure (XX), in Appendix of Annex 4), ...."


Figure 2. Image of the Requirement to be Added to Regulation No. 125

