Economic Commission for Europe
Inland Transport Committee
Working Party on the Transport of Dangerous Goods
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Item 5 (a) of the provisional agenda
Proposals for amendments to annexes A and B of ADR:
Construction and approval of vehicles

Section 9.7.6 - Rear protection of vehicles

Transmitted by the Government of France*

Summary

Executive summary: The proposal is intended to clarify 9.7.6 in respect of the distance of at least 100 mm between the rear wall of the tank and the rear of the bumper, as well as of tilting shells, to avoid problems of interpretation

Action to be taken: Amend 9.7.6 of ADR.

Introduction

1. According to 9.7.6 of ADR on rear protection of vehicles:

“A bumper sufficiently resistant to rear impact shall be fitted over the full width of the tank at the rear of the vehicle. There shall be a clearance of at least 100 mm between the rear wall of the tank and the rear of the bumper (this clearance being measured from the rearmost point of the tank wall or from projecting fittings or accessories in contact with the substance being carried).”

2. It seems that, despite the clarification in brackets, there are some problems of interpretation regarding the distance of at least 100 mm between the rear wall of the tank and the rear of the bumper.

* Subprogramme 2 of the programme budget for 2020 (A/74/6 (Sect. 20) and additional information).
3. This requirement is generally met by positioning the vehicle’s rear underrun protection device according to UN Regulation No. 58 so as to maintain a clearance of 100 mm.

4. The rear underrun protection device is positioned in such a way that there is clearance of at least 100 mm between the rear wall of the tank or its projecting fittings in contact with the substance being carried and the rear face of the underrun protection device, i.e. the face of the protection device facing the rear wall of the tank.

5. The aim of this safety requirement is rear protection, particularly in the event of an impact, and we believe it is essential that the distance of 100 mm be respected. We therefore propose that the wording of the second sentence of 9.7.6 be amended as specified in proposal 1 below.

6. Secondly, the third sentence of 9.7.6 deals with the case of vehicles with tilting shells. We think that the meaning of this provision, which was introduced into ADR in 1993, should be clarified, particularly to take account of subsequent developments in the regulations on vehicle construction.

7. In addition, by analogy with the protection of fittings and accessories mounted laterally according to special provision TE19, a requirement in respect of the resistance of this protection would facilitate its application. We therefore propose that the wording of the third sentence of 9.7.6 should be amended as specified in proposal 2 below.

Proposal 1

8. Amend the second sentence of 9.7.6 to read as follows:

“There shall be a clearance of at least 100 mm between the rear wall of the tank, or of its projecting fittings in contact with the substance being carried, and the face of the bumper facing the rear wall of the tank. “

Proposal 2

9. Amend the third sentence of 9.7.6 to read as follows:

“Vehicles with a tilting shell with rear discharge for which the clearance of 100 mm cannot be respected are provided with a means of protection which protects the shell and the rear fittings. This additional protection shall have a section modulus of at least 20 cm³ and respect the clearance of 100 mm.”

Justification

10. These amendments will facilitate application of the requirements concerning the rear protection of vehicles.