Proposal for Supplement 1 to the 03 series of amendments to Regulation No. 118 (Burning behaviour)

Submitted by the expert from the Netherlands *

The text reproduced below was prepared by the expert from the Netherlands to extend the scope of UN Regulation No. 118 to vehicles powered by compressed natural gas (CNG). The modifications to the current text of UN Regulation No. 118 are marked in bold for new characters.

* In accordance with the programme of work of the Inland Transport Committee for 2012–2016 (ECE/TRANS/224, para. 94 and ECE/TRANS/2012/12, programme activity 02.4), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.
I. Proposal

Paragraphs 1. to 1.3., amend to read:

“1. Scope

1.1. This Regulation applies to the burning behaviour (ignitibility, burning rate and melting behaviour) and to the capability to repel fuel or lubricants of materials used in vehicles of categories M₃, Classes II and III¹ and in vehicles of category M₂ or M₃ using compressed natural gas (CNG) in their propulsion system.

Type approvals are granted according to:

1.2. Part I - Approval of a vehicle type with regard to the burning behaviour and/or the capability to repel fuel or lubricant of the components used in the interior compartment, the engine compartment and any separate heating compartment.

1.3. Part II – Approval of a component with regard to its burning behaviour and/or its capability to repel fuel or lubricant installed in the interior compartment, the engine compartment or any separate heating compartment.”

II. Justification

The existing provisions for buses and coaches focus on a rapid evacuation of the vehicle in cases of emergency. However, a fire accident in the Netherlands showed that a serious risk remains for other road users and the surroundings of a vehicle fuelled by CNG. In the accident, the pressure relief device implemented according to UN Regulation No. 110 produced a horizontal jet flame for several minutes which could have had serious consequences for other road users and the area around the vehicle. The Netherlands considers it necessary that all measures be taken to limit the risk of a fire in CNG vehicles. One of the measures is the limitation of the speed with which a fire can develop into a fire that cannot be controlled or extinguished. The Netherlands proposes to extend the scope of UN Regulation No. 118 to all vehicles of category M₂ or M₃ using CNG in their propulsion system.

¹ As defined in the Consolidated Resolution on the Construction of Vehicles (R.E.3.), document ECE/TRANS/WP.29/78/Rev.2, para. 2.