Economic Commission for Europe
Inland Transport Committee
World Forum for Harmonization of Vehicle Regulations
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Item 2 (b) of the provisional agenda
Amendments to regulations on buses and coaches:
UN Regulation No. 118 (burning behaviour of materials)

Proposal for Supplement 2 to the 03 series of amendments
and Supplement 5 to the 02 series of amendments to
Regulation No. 118 (Burning behaviour of materials)

Submitted by the experts from Spain*

The text reproduced below was prepared by the expert from Spain and aims at
clarifying that parts made of plastic glazing are required to undergo the tests described in
Annexes 6 to 8 of the Regulation 118. The modifications to the current text of UN Regulation
No. 118 are marked in bold characters for new and strikethrough for deleted characters.

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* In accordance with the programme of work of the Inland Transport Committee for 2021 as outlined in
proposed programme budget for 2021 (A/75/6 (Sect.20), para 20.51), the World Forum will develop,
harmonize and update UN Regulations in order to enhance the performance of vehicles. The present
document is submitted in conformity with that mandate.
I. Proposal

Insert a new paragraph 6.1.9. to Part II of the 02 and 03 series of amendments, to read:

"6.1.9. "Plastic glazing" is a glazing material that contains as an essential ingredient one or more organic polymeric substances of large molecular weight, is solid in its finished state and, at some stage in its manufacture of processing into finished articles, can be shaped by flow."

Amend series 03 Part II paragraph 6.2.8.1. and series 02 paragraph 6.2.7.1. to read:

"6.2.8. Materials which are not required to undergo the tests described in Annexes 6 to 8 are:

6.2.8.1. Parts made of metal or glass; Parts made of plastic glazing are not included in this exemption."

II. Justification

1. The reason for the exemption to the parts made of metallic and glass elements is that these materials are not affected by the tests according to the Annexes 6 to 8 of UN Regulation No. 118.

   (a) Annex: 6 Test to determine the horizontal burning rate of materials
   (b) Annex: 7 Test to determine the melting behaviour of materials
   (c) Annex: 8 Test to determine the vertical burning rate of materials

2. This behaviour (fire resistance) is not present at plastic materials used in many parts installed inside the vehicles. Accordingly, parts made of plastic glazing should not be affected by the exemption of para. 6.2.8., and therefore, these materials should be tested.

3. The clarification is proposed to be included inside the UN Regulation No. 118 to avoid misinterpretations that could lead to exemptions, and therefore constitute a risk of safety.

4. It is also proposed to include, at Part II of UN Regulation 118, the definition of plastic glazing made at UN Regulation 43 in order to define precisely the materials not covered by para 6.2.8.