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**Economic Commission for Europe****Inland Transport Committee****World Forum for Harmonization of Vehicle Regulations****Working Party on Pollution and Energy****Seventy-first session**

Geneva, 9-12 June 2015

Item 3(a) of the provisional agenda

**Light vehicles – Regulations Nos. 68 (Measurement of the maximum speed, including electric vehicles), 83 (Emissions of M<sub>1</sub> and N<sub>1</sub> vehicles), 101 (CO<sub>2</sub> emissions/fuel consumption) and 103 (Replacement pollution control devices)****Proposal for amendments to the 05 and 06 series of amendments to Regulation No. 83 (Emissions of M<sub>1</sub> and N<sub>1</sub> vehicles)****Submitted by the expert from the European Commission\***

The text reproduced below is submitted by the expert from the European Commission. The proposal aims at correcting the unit of the road load coefficient *b* used in the formula for the calculation of the resistance to progress force. The modifications to the current text of Regulation No. 83 are marked in bold for new or strikethrough for deleted characters.

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\* 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

Annex 4a,

Table 3, amend to read:

"

| <i>Reference mass of vehicle RW<br/>(kg)</i> | <i>Equivalent inertia</i> | <i>Power and load absorbed by the<br/>dynamometer at 80 km/h</i> | <i>Road Load Coefficients</i> |   |
|--|---------------------------|--|-------------------------------|---|
|  | kg                        | kW   | a (N)                         | <del>b (N/kph)</del><br><b>b (N/(km/h)<sup>2</sup>)</b> |
| ...  | ...                       | ...  | ...                           | ...   |

"

## II. Justification

The correct unit associated with the road coefficient b in the formula for the resistance to progress force ( $F = a + b v^2$ ) is  $N/(km/h)^2$ . In the current text this unit is wrongly indicated as N/kph.

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