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Item 3(c) of the provisional agenda

Fuel/Energy Consumption, CO₂ Emissions & Electric Range – Regulation No. 101**Proposal for an amendment to
Regulation No. 101****Submitted by the expert from the United Kingdom ***

The text reproduced below was prepared by the expert from the United Kingdom to amend the provisions of Regulation No. 101 to align procedures for declaring electric range and electrical energy consumption with those used for declaring CO₂ emissions and fuel consumption. This will allow vehicle manufacturers some discretion for their declared value(s) and so help to manage customer expectations with this technology. Modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106 and ECE/TRANS/2010/8, 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

Paragraph 5.3.2., amend to read:

- “5.3. Description of tests for vehicles powered by an electric power train only
.....
5.3.2. The technical service in charge of the tests conducts the measurement of the electric range of the vehicle according to the method described in Annex 9.
~~The electric range measured by this method is the only one which may be included in sales promotional material.”~~

Paragraphs 5.4.6., amend to read:

- “5.4. Description of tests for vehicles powered by a hybrid electric power train
.....
5.4.6. The technical service in charge of the tests conducts the measurement of the electric range of the vehicle, according to the method described in Annex 9 to this Regulation. The result shall be expressed in km, rounded to the nearest whole number.
~~The electric range measured by this method is the only one which may be included in sales promotional material and which may be used for the calculations of Annex 8.”~~

Insert new Paragraphs 5.5.4. to 5.5.7., to read:

- “5.5. Interpretation of results
.....
5.5.4. The electric range value adopted as the type approval value shall be the value declared by the manufacturer if this is no more than 4 per cent higher than the value measured by the technical service. The declared value may be lower than the measured value without any limitations.
5.5.5. If the declared range value exceeds the value measured by the technical service by more than 4 per cent, then another test is run on the same vehicle.
When the manufacturer’s declared value does not exceed the average of the two test results by more than 4 per cent, then the value declared by the manufacturer is taken as the type approval value.
5.5.6. If the declared value still exceeds the average measured value by more than 4 per cent, a final test is run on the same vehicle. The average of the three test results is taken as the type approval value.

5.5.7. The electric range determined according to paragraphs 5.5.4. to 5.5.6. is the only one which may be included in sales promotional material and, in the case of vehicles powered by a hybrid electric power train, is the only value which may be used for the calculations in Annex 8.”

II. Justification

1. At present Regulation 101 requires that the measured value of electric range is the only value that may be used in promotional literature. Unlike CO₂, fuel consumption and electrical energy consumption, manufacturers are not permitted to specify more conservative values. The UK proposes that, in order to manage customer expectations regarding the electric range of electric and hybrid electric vehicles, manufacturers be permitted to use declared electric range values which are lower than the measured value.

2. This proposal inserts additional text permitting lower values to be declared for electric range than those measured. The declared value shall then be the value that is used in promotional literature and, for Off Vehicle Charging hybrid electric vehicles, for the calculation of weighted CO₂, fuel consumption and electrical energy consumption in Annex 8.

3. The text is modelled on paragraphs 5.5.1. to 5.5.3. on declared values for CO₂ and electrical energy consumption. For consistency with these paragraphs, the proposal also permits declared range values up to 4% higher than those measured.
