

GTR13

2. *Scope*

This regulation applies to all hydrogen fuelled vehicles of Category 1-1 and 1-2, with a gross vehicle mass (GVM) of 4,536 kilograms or less.

Proposal

2. **Scope (revised GTR20)**

2.1 This regulation applies to **the hydrogen safety performance of** all hydrogen fuelled vehicles of Category 1 and Category 2 with a maximum design speed exceeding 25 km/h, **equipped with electric power train containing high voltage bus, excluding vehicles permanently connected to the grid.**

2.2. This regulation includes the following two sets of requirements **that may be selected by Contracting Parties** according to the category and gross vehicle mass (GVM) of the vehicles:

- (a) For all vehicles of Category 1-1 and vehicles of Categories 1-2 and 2 with GVM of 4,536 kg or less, the requirements of paragraphs 5(XX) and 6(XX) shall apply in accordance with the general requirements specified in paragraph 4;
- (b) For vehicles of Category 1-2 and Category 2 with GVM exceeding 3,500 kg¹, the requirements of paragraphs 7(YY) and 8(YY) shall apply in accordance with the general requirements specified in paragraph 4.

2.3 Contracting Parties may exclude the following vehicles from the application of this regulation:

- (a) A vehicle with four or more wheels whose unladen mass is not more than 350 kg, not including the mass of traction batteries, whose maximum design speed is not more than 45 km/h, and whose engine cylinder capacity and maximum continuous rated power **in the case of hybrid electric vehicles** do not exceed 50 cm³ for spark (positive) ignition engines and 4 kW for electric motors respectively; **or whose**

¹ For vehicles with GVM exceeding 3,500 kg but not exceeding 4,536 kg, each Contracting Party may elect to apply either provisions of paragraph 2.2.(a) or paragraph 2.2.(b) depending on the vehicle classification systems used in the domestic legislation.

~~maximum continuous rated power in the case of battery electric vehicles does not exceed 4 kW; and~~

- (b) A vehicle with four or more wheels, other than that classified under (a) above, whose unladen mass is not more than 450 kg (or 650 kg for vehicles intended for carrying goods), not including the mass of traction batteries and whose maximum continuous rated power does not exceed 15 kW.

4. Applicability of requirements (*revised GTR13*)

- 4.1. ~~The requirements of paragraph 5. (using test conditions and procedures in paragraph 6.) apply to all compressed hydrogen fuelled vehicles.~~

Hydrogen fuelled vehicles must comply with the paragraphs listed in following table:

Vehicle Category	Requirements
Category 1-1	5(XX) and 6(XX)
Category 1-2 [$< 3,5$ kg]	5(XX) and 6(XX)
Category 1-2 [3,5t to 4,536 kg]	5(XX) and 6(XX) or 7(YY) and 8(YY)
Category 1-2 [$>4,536$ kg]	7(YY) and 8(YY)
Category 2 [$< 3,5$ kg]	5(XX) and 6(XX)
Category 2 [3,5t to 4,536 kg]	5(XX) and 6(XX) or 7(YY) and 8(YY)
Category 2 [$>4,536$ kg]	7(YY) and 8(YY)

- 4.2. Each contracting party under the UN 1998 Agreement shall maintain its existing national crash tests (frontal, side, rear and rollover) and use the limit values of section paragraph 5.2.2. for compliance.
- 4.3. ~~The requirements of paragraph 5.3. apply to all hydrogen fuelled vehicles using high voltage.~~