Proposals concerning definitions of motor cycle vehicles

Transmitted by the Russian Federation

The proposals reproduced below have been prepared for consideration in the framework of Agenda Item 8. They relate to proposed modified definitions of motor cycle vehicles for inclusion into the 1971 European Agreement Supplementing the 1968 Convention on Road Traffic (documents E/ECE/813-E/ECE/TRANS/567 and Amend.1 and Amend.2), as prepared by the group of experts established by WP.1 and adopted by GRSG (document TRANS/WP.29/2002/68).

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The Russian Federation feels necessary to note the important feature of the proposed terms specifying definitions of mopeds and motor cycles and inserting new definitions of tricycles, light quadricycles and quadricycles, which take into account the possibility of use of different types of design: traditional with internal combustion engines, and new as electric vehicles.

Consideration of the documents containing such definitions (please refer to the Annex) indicates that the terms and definitions proposed in the document TRANS/WP.29/2002/68 are harmonized with the Directive 92/61/EEC related to the type-approval of two- and three-wheel motor vehicles. The scope of that Directive also covers light quadricycles and quadricycles, which, according to the mentioned Directive are considered as mopeds and tricycles respectively.

Supporting proposed in the document TRANS/WP.29/2002/68 terminology with the motor cycle definitions, the Russian Federation feels expedient to revise the similar way the definitions formulated in the Annex 7 (Revision 2) of the Consolidated Resolution on the Construction of Vehicles (R.E.3) (document TRANS/WP.29/78/Rev.1/Ampend.2), which are now different in the criterion of vehicle speed: 45 km/h in the document TRANS/WP.29/2002/68; 50 km/h in the document TRANS/WP.29/78/Rev.1/Ampend.2.

The lack of terms and requirements related to quadricycles in the document TRANS/WP.29/78/Rev.1/Ampend.2 regardless widespread of such vehicles, stimulated adoption the list of national requirements to quadricycles in the Russian Federation, taking into account their design specific features lied between the L5 и M1 categories of vehicles. The mentioned list of requirements was adopted in the form of the national standard GOST R 51815-2001, which uses the terms harmonized with those of the Directive 92/61/EEC.

Taking into account reaching further harmonization in technical terminology and requirements, it is proposed to revise paragraph 1 of the Annex 7 of the Consolidated Resolution R.E.3:

- to reduce value of the criterion of vehicle speed from 50 km/h to 45 km/h;
- to include notations considering light quadricycles to the L2 category of vehicles and quadricycles to the L3 category of vehicles.

As the alternative approach, introduction of new categories L6 and L7 for light quadricycles and quadricycles respectively may be considered.

It is also proposed to develop the list of requirements to the quadricycles (similar to that established by the Russian national regulations) in the form of a separate ECE Regulation or a separate clause of the Consolidated Resolution R.E.3.
### Annex

Comparison of terminology related to the light vehicles of L category

|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Moped                         | - a two-wheeled or three-wheeled vehicle with a maximum design speed of not more than 45 km/h and characterized by:  
(1) in the case of the two-wheel type, an engine whose cylinder capacity does not exceed 50 cm³ in the case of the internal combustion type, or maximum continuous rated power is no more than 4 kW in the case of an electric motor;  
(2) in the case of the three-wheel type, an engine whose cylinder capacity does not exceed 50 cm³ if of the spark (positive) ignition type, or maximum net power output does not exceed 4 kW in the case of other internal combustion engines, or maximum continuous rated power does not exceed 4 kW in the case of an electric motor. | - a two- or three-wheel vehicle fitted with an engine having a cylinder capacity not exceeding 50 cm³ if of the internal combustion type and a maximum design speed of not more than 45 km/h | Category L₁ (paragraph 1.1.): A two-wheeled vehicle with an engine cylinder capacity in the case of a thermic engine not exceeding 50 cm³ and whatever the means of propulsion a maximum design speed not exceeding 50 km/h.  
Category L₂ (paragraph 1.2.): A three-wheeled vehicle of any wheel arrangement with an engine cylinder capacity in the case of a thermic engine not exceeding 50 cm³ and whatever the means of propulsion a maximum design speed not exceeding 50 km/h.  
Category L₃ (paragraph 1.3.): A two-wheeled vehicle with an engine cylinder capacity in the case of a thermic engine exceeding 50 cm³ or whatever the means of propulsion a maximum design speed exceeding 50 km/h.  
Category L₄ (paragraph 1.4.): A vehicle with three wheels asymmetrically arranged in relation to the longitudinal median plane with an engine cylinder capacity in the case of a thermic engine exceeding 50 cm³ or whatever the means of propulsion a maximum design speed exceeding 50 km/h (motor cycles with sidecars). |
<p>| Motor cycle                   | - any two-wheeled vehicle, with or without a side-car with a maximum design speed of more than 45 km/h or an engine having a cylinder capacity of more than 50 cm³ if of the internal combustion type, or a maximum continuous rated power of more than 4 kW in the case of an electric motor. | - a two-wheel vehicle with or without sidecar, fitted with an engine having a cylinder capacity of more than 50 cm³ if of the internal combustion type and/or a maximum design speed of more than 50 km/h |  |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Directive</th>
<th>Consolidated Resolution R.E.3, Annex 7, Revision 2 (document TRANS/WP.29/78/Rev.1/Amend.2)</th>
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<tr>
<td>Motor tricycle:</td>
<td>- a vehicle with three symmetrically arranged wheels fitted with an engine having a maximum design speed of more than <strong>45 km/h</strong> or a cylinder capacity of more than <strong>50 cm³</strong> if of the internal combustion type or a maximum continuous rated power of more than 4 kW in the case of an electric motor.</td>
<td>Directive 92/61/EEC relating to the type-approval of two- and three-wheel motor vehicles</td>
<td>Category L₅ (paragraph 1.5.): A vehicle with three wheels symmetrically arranged in relation to the longitudinal median plane with an engine cylinder capacity in the case of a thermic engine exceeding 50 cm³ or whatever the means of propulsion a maximum design speed exceeding <strong>50 km/h</strong>.</td>
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<td>Light quadricycle</td>
<td>- a vehicle with four wheels whose unladen mass is not more than <strong>350 kg</strong>, not including the mass of the batteries in case of electric vehicles, whose maximum design speed is not more than <strong>45 km/h</strong>, and: (1) whose engine cylinder capacity does not exceed <strong>50 cm³</strong> for spark (positive) ignition engines, or (2) whose maximum net power output does not exceed 4 kW in the case of other internal combustion engines, or (3) whose maximum continuous rated power does not exceed 4 kW in the case of an electric motor.</td>
<td>- a motor vehicle with four wheels having unladen mass less than 350 kg, not including the mass of batteries in case of electric vehicles, whose maximum design speed is not more than <strong>45 km/h</strong> and whose engine cylinder capacity does not exceed <strong>50 cm³</strong> for spark-ignition engines (or whose maximum net power is no more than 4 kW for other types of engines (for the purpose of this Directive these are considered to be mopeds))</td>
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<td>Quadricycle</td>
<td>- a vehicle with four wheels, other than a light quadricycle, whose unladen mass is not more than <strong>400 kg</strong> (550 kg for vehicles intended for carrying goods), not including the mass of batteries in the case of electric vehicles, and whose maximum net engine power does not exceed <strong>15 kW</strong>.</td>
<td>- a quadricycle other than a light quadricycle, whose unladen mass is not more than <strong>400 kg</strong> (550 kg for vehicles intended for carrying goods), not including the mass of batteries in the case of electric vehicles, whose maximum net power does not exceed <strong>15 kW</strong> (for the purpose of this Directive these are considered to be motor tricycles)</td>
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