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Transmitted by the expert from the European  
Commission

DRAFT PROPOSAL FOR A HORIZONTAL REGULATION ON COUNTRY CODES, VEHICLE  
CATEGORIES, DEFINITIONS AND SCOPES

**Note:** The text reproduced below was prepared by the experts from the European Commission mainly in order to improve the legislative management within the framework of the 1958 Agreement. A Horizontal Regulation allows a more systematic shift from one set of vehicle categories to another. Equally as much, backlogs with regard to Country Code updating for each Regulation can be avoided. Finally, a Horizontal Regulation will, in the medium term, permit harmonized and centralized definitions to be used in many regulations. In the future, it might be used for other purposes as well.

How does a new vehicle category, e.g. L<sub>6</sub> and L<sub>7</sub>, get into the 1958 Agreement system today? Firstly, it is introduced into the non-binding resolution R.E.3 Annex 7. But, legally speaking, this is not sufficient to introduce a new vehicle category into any of the Regulations. Contrary to what is normally assumed, each of the Regulations has to refer to this, or a later, version of R.E.3 Annex 7 before it really covers the new vehicle category. After the introduction of L<sub>6</sub> and L<sub>7</sub> into R.E.3 Annex 7 in March 2005, all Regulations that should cover L<sub>6</sub> and L<sub>7</sub> have to be amended and must explicitly refer to the new R.E.3 Annex 7 (or an even later version). This cumbersome exercise tends to be neglected, probably because the modification of R.E.3 is deemed to be sufficient for extending the scopes of the Regulations to the new vehicle categories (e.g.. L<sub>6</sub> and L<sub>7</sub>). The consequence is a de facto unclear situation with regard to the scope of Regulations (in our example: covering “vehicles of category L”). Some type-approval authority agents will not check to what version of R.E.3 Annex 7 the applied Regulation refers to. Thus they will issue type approvals covering L<sub>6</sub> and L<sub>7</sub> (or assume that a type approval given elsewhere covers L<sub>6</sub> and L<sub>7</sub>) though the applied Regulation has not yet referred to the new R.E.3 Annex 7. Only when the last Regulation has referred to the new R.E.3 Annex 7 or an even later version, the de facto uncertainty will disappear. The whole process of introduction of a new vehicle category might thus take many years and create a long limbo period.

The situation is even more complicated with regard to vehicle categories or sub-categories that have not been newly introduced but just modified. Whereas in practice only the new R.E.3 Annex 7 vehicle definitions are to be applied, the old vehicle definitions remain legally valid for those Regulations that have not yet referred to the new version of R.E.3 Annex 7. It is even possible that a set of three or more vehicle definitions co-exist if different Regulations refer to multiple versions of R.E.3 Annex 7 that are different with regard to the same vehicle category.

The only effective remedy against the de facto uncertainty and frequent legal misinterpretation is to fix vehicle categories and sub-categories in a cross-cutting way, thus in a legally binding instrument prevailing even on other Regulations under the 1958 Agreement. Such a legal instrument can be established under the 1958 Agreement: All Regulations are deemed to be annexes to the 1958 Agreement. It is possible either to modify each of the Regulations or to establish a cross-cutting Regulation which would, in fact, be nothing less than a Regulation which

would modify the others in one stroke. At the end of the day, the proposed Horizontal Regulation would create coherence between the real legal situation and the legal situation assumed by most users of Regulations.

The Horizontal Regulation is economic: Within few years, it will make hundreds of individual modifications on vehicle categories and country codes superfluous, thus keeping the 1958 Agreement manageable and giving time to more in-depth work on the real substance: technical requirements.

Proposal for a  
HORIZONTAL REGULATION ON COUNTRY CODES, VEHICLE CATEGORIES, DEFINITIONS AND  
SCOPES

1. SCOPE OF THIS REGULATION

- 1.1. This Regulation covers country codes, definitions and scopes of all Regulations under the Revised 1958 Agreement.
- 1.2. Unless it is otherwise stated in an individual Regulation, this horizontal Regulation prevails. It amends all Regulations.

2. COUNTRY CODES

Country codes for type approvals, marks and communication forms are as follows:

E 1 GERMANY	E 24 IRELAND
E 2 FRANCE	E 27 SLOVAKIA
E 3 ITALY	E 28 BELARUS
E 4 NETHERLANDS	E 29 ESTONIA
E 5 SWEDEN	E 31 BOSNIA AND HERZEGOVINA
E 6 BELGIUM	E 32 LATVIA
E 7 HUNGARY	E 34 BULGARIA
E 8 CZECH REPUBLIC	E 36 LITHUANIA
E 9 SPAIN	E 37 TURKEY
E 10 SERBIA AND MONTENEGRO	E 39 AZERBAIJAN
E 11 UNITED KINGDOM	E 40 FORMER YUGOSLAV REPUBLIC OF MACEDONIA
E 12 AUSTRIA	E 42 EUROPEAN COMMUNITY*
E 13 LUXEMBOURG	E 43 JAPAN
E 14 SWITZERLAND	E 45 AUSTRALIA
E 16 NORWAY	E 46 UKRAINE
E 17 FINLAND	E 47 SOUTH AFRICA
E 18 DENMARK	E 48 NEW ZEALAND
E 19 ROMANIA	E 49 CYPRUS
E 20 POLAND	E 50 MALTA
E 21 PORTUGAL	E 51 REPUBLIC OF KOREA
E 22 RUSSIAN FEDERATION	E 25 CROATIA
E 23 GREECE	E 26 SLOVENIA

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\* Approvals are granted by its Member States using their respective ECE symbols.

3. DEFINITIONS AND INTERPRETATION RULES WITH REGARD TO VEHICLE CATEGORIES AND MASSES

3.1. DEFINITIONS USED FOR VEHICLE CATEGORIES

- 3.1.1. Vehicle or Road vehicle means any wheeled or track-laying object [with a maximum design speed of more than [6] km/h] intended for circulation on the road that is either self - propelled or towed by a self -propelled object.
- 3.1.2. Power-driven vehicle means any self -propelled vehicle.
- 3.1.3. Motor vehicle means a power-driven vehicle, being complete or incomplete, [with a maximum design speed exceeding [25] km/h], except agricultural and forestry tractors (see 4.6) and mobile machinery (3.1.11.).
- 3.1.4. Trailer means any non-self propelled vehicle, which is designed and constructed to be towed by a power-driven vehicle.
- 3.1.5. (deleted)
- 3.1.6. Towing vehicle<sup>1</sup> means any self-propelled vehicle the principle purpose of which is to tow a trailer.
- 3.1.7. Vehicle combination means any ensemble constituted by a power-driven vehicle coupled to one or more trailer (s);
- 3.1.8. (deleted)
- 3.1.9. Incomplete vehicle means any vehicle able to run on the road , which requires completion of at least one further stage of construction before being ready for the purpose for which it has been designed and constructed ;
- 3.1.10. Complete vehicle means any vehicle which does not require further construction stages in order to be fit for the purpose for which it has been designed and constructed , other than minor finishing operations such as painting and addition of retro-reflecting markings ;
- 3.1.11. Mobile machinery means a power-driven vehicle which is designed and constructed specifically to perform work [...] and which, because of its construction characteristics, is not suitable for carrying passengers or for transporting goods. Auxiliary machinery mounted on a motor vehicle chassis shall be considered as goods, not as mobile machinery.
- 3.1.12. Seating position means any individual seat or any part o f a

Comment: Subject to developments of GRE.

Comment: Via the definition of vehicle in 3.1.1 non-road mobile machinery is excluded.

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<sup>1</sup> Towing vehicles are called “tractors”, “truck tractors”, “tractor units ” or “tractive units” in some of the Regulations.

bench seat intended to seat one person. If there is a seat anchorage point available for a removable seat, it shall be counted in the determination of the number of seating positions and of the mass.

- 3.1.13. A Vehicle is designed and constructed for the carriage of goods if the following condition ~~is~~ ~~are~~ is met:

$$\frac{P-(R+Sx68)}{S} > 6, \quad \text{and} \\ \text{where}$$

P = technically permissible maximum laden mass in kg  
R = mass in running order in kg  
S = number of simultaneous seating and standing positions excluding the driver

Comment: This formula has been used in R.E.3 for distinction between M and N multi-purpose vehicles and in S.R.1. The third criteria of S.R.1 leads to a logic circle and has been dropped for this reason. We wonder whether the second criteria should not be dropped as well so as to make a clear distinction between M and N independently from the size of the vehicle and the number of passengers. We have, as in S.R.1, included standing positions.

- 3.1.14. If a vehicle does not qualify as a vehicle used for the carriage of goods (see 3.1.13.) it is deemed to be designed and constructed for the carriage of passengers.

### 3.2. DEFINITIONS USED FOR VEHICLE MASSES

- 3.2.1. Unladen vehicle mass means the nominal mass of the vehicle [type and version] as indicated by the manufacturer(s) including all factory fitted [standard] equipment for normal operation of that vehicle [type and version] (e.g. fire extinguisher, tools, spare wheel), plus coolant, oils, 90 per cent of fuel and 100 per cent of other gas or liquids, as specified by the manufacturer, with the exception of [used] water.

Comment: What is meant by that: water to be used or waste water?

- 3.2.2. Mass of a vehicle in running order means the unladen vehicle mass with the addition of a driver (75 Kg) and, for vehicles designed and constructed for the carriage of more than 8 persons (in addition to the driver), the mass of a crew member (75 Kg), if there is a crew seat amongst the 8 or more seats.

- 3.2.3. Gross vehicle mass or maximum mass means the technically permissible maximum laden mass as declared by the manufacturer.

### 3.3. INTERPRETATION RULES WITH REGARD TO MASSES

- 3.3.1. ~~All masses refer to kilogram (kg).~~  
Equipment not counted under 3.2.1 is deemed to be load.

Comment: Not needed.

- 3.3.2. In the case of a towing vehicle designed and constructed to be coupled to a semitrailer<sup>2</sup>, the mass to be considered for classifying the towing vehicle is the mass of the towing vehicle in running [order], increased by the mass corresponding to the maximum static vertical load transferred to the towing

Comment: "Order" instead of "trim", because "running trim" has not been defined yet.

<sup>2</sup> See 4.4.5.1.

vehicle by the semitrailer and, where applicable, by the maximum mass of the towing vehicle's own load.

3.3.3. [The equipment and installations carried on a power-driven vehicle chassis (of crane vehicles, workshop vehicles, publicity vehicles, etc.) are regarded as being equivalent to goods.]

Comment: We skipped the reference to the "special purpose vehicle" here because the word is differently used in 4.5 of this Horizontal Regulation, as before in 3.4.2 of R.E.3

3.3.4. All mass indications of an incomplete vehicle shall be corrected at each stage of completion .

#### 4. CLASSIFICATION OF POWER -DRIVEN VEHICLES AND TRAILERS

##### 4.1. CATEGORY L - [LIGHT MOTOR VEHICLES]

Comment: New title with regard to L6, L7 and sidecars with two wheels

"Category L vehicle" means a motor vehicle designed and constructed primarily for the carriage

- of passengers (see 3.1.14.) having an unladen vehicle mass of no more than 400 kg , or
- of goods (see 3.1.13.) having an unladen vehicle mass of no more than 550 kg,

both not including the mass of the battery in the case of electric vehicles .

4-wheeled vehicles, except motor cycles with sidecars, do not belong to Category L if they have a maximum continuous rated power exceeding 15 kW.

Comment: Necessary if L4 is modified as suggested above.

##### 4.1.1. Category L<sub>1</sub>:

A two-wheeled vehicle having an engine cylinder capacity , in the case of [an internal combustion engine], not exceeding 50 cm<sup>3</sup> and, whatever the means of propulsion , a maximum design speed not exceeding 50 km/h.

Comment: Instead of "thermic"

##### 4.1.2. Category L<sub>2</sub>:

A three-wheeled vehicle of any wheel arrangement with an engine cylinder capacity , in the case of an internal combustion engine, not exceeding 50 cm<sup>3</sup> and, whatever the means of propulsion , a maximum design speed not exceeding 50 km/h.

##### 4.1.3. Category L<sub>3</sub>:

A two-wheeled vehicle having an engine cylinder capacity , in the case of an internal combustion engine, exceeding 50 cm<sup>3</sup> or, whatever the means of propulsion , a maximum design speed exceeding 50 km/h.

4.1.4. Category L<sub>4</sub>:

A vehicle with three ~~or more~~ wheels asymmetrically arranged in relation to the longitudinal median plane with an engine cylinder capacity, in the case of an internal combustion engine, exceeding 50 cm<sup>3</sup> or, whatever the means of propulsion, a maximum design speed exceeding 50 km/h.

Comment: Sidecars having more than 1 wheel should be covered as well.

4.1.5. Category L<sub>5</sub>:

A vehicle with three wheels symmetrically arranged in relation to the longitudinal median plane with an engine cylinder capacity in the case of an internal combustion engine exceeding 50 cm<sup>3</sup> or, whatever the means of propulsion, a maximum design speed exceeding 50 km/h.

4.1.6. Category L<sub>6</sub>:

A vehicle with four wheels whose unladen mass is not more than 350 kg, not including the mass of the batteries in the case of electric vehicles, whose maximum design speed is not more than 50 km/h, and whose engine cylinder capacity does not exceed 50 cm<sup>3</sup> for spark (positive) ignition engines, or whose continuous rated power does not exceed 4 kW in the case of electric ~~motors~~ (3).

Comment: Russian proposal TRANS/WP.29/GRSG/2004/17 as corrected by TRANS/WP.29/GRSG/65, para. 42, as much as approved by GRSG

4.1.7. Category L<sub>7</sub>:

A vehicle with four wheels, other than that classified for the category L<sub>4</sub> or L<sub>6</sub>, whose unladen mass is not more than 400 kg (550 kg for vehicles intended for carrying goods), not including the mass of the batteries in the case of electric vehicles, and whose maximum continuous rated power does not exceed 15 kW (4) ~~in the case of internal combustion engines, or whose maximum continuous rated power does not exceed 15 kW in the case of electric vehicles.~~

Comment: idem

4.2. CATEGORY M - MOTOR VEHICLES HAVING AT LEAST FOUR WHEELS FOR THE CARRIAGE OF PASSENGERS

"Category M vehicle" means a motor vehicle with four or more wheels designed and constructed for the carriage of passengers (see 3.1.14.) having an unladen vehicle mass of more than 400 kg (not including the mass of the batteries in case of electric vehicles) or an engine power higher than 15 kW.

Comment: New criteria, necessary to avoid overlapping with L6.7

4.2.1. Category M<sub>1</sub>:

4.2.1.1. Vehicles used for the carriage of passengers and

3 See also 6.3.

4 See also 6.3

comprising not more than eight seats in addition to the driver's seat.

4.2.1.2. Vehicles of category  $M_1$  can belong to:

- AA Saloon:  
Standard ISO 3833:1977, term No. 3.1.1.1., but including also vehicles with more than 4 side wind ows.
- AB Hatchback:  
Saloon (AA) with a hatch at the rear end of the vehicle.
- AC Station Wagon (Estate car):  
Standard ISO 3833:1977, term No. 3.1.1.4.
- AD Coupé:  
Standard ISO 3833:1977, term No. 3.1.1.5.
- AE Convertible:  
Standard ISO 3833:1977, term No. 3.1.1.6.
- AF Multi-purpose vehicle:  
Motor vehicle other than those mentioned in AA to AC intended for carrying passengers and their luggage or goods, in a single compartment.

Comment: Necessary?

4.2.2. Category  $M_2$ :

Vehicles comprising more than eight seats in addition to the driver's seat, and having a maximum mass not exceeding 5 tonnes.

4.2.3. Category  $M_3$ :

Vehicles comprising more than eight seats in addition to the driver's seat, and having a maximum mass exceeding 5 tonnes.

4.2.4. Vehicles of category  $M_2$  and  $M_3$  belong to:

- (i) one ~~or more~~ of the three classes (Class I, Class II, Class III) in accordance with Regulations Nos. 36 and 107.
- (ii) one of the two classes (Class A, Class B) in accordance with Regulation No. 52.

Comment: Is there a case in which a vehicle belongs to two classes at the same time?

4.2.4.1. Class I:

Vehicles designed and constructed with areas for standing passengers, to allow frequent passenger movement.

4.2.4.2. Class II:

Vehicles designed and constructed principally for the carriage of seated passengers, and designed and constructed to allow the carriage of standing passengers in the gangway and/or in an area which does not



exceed the space provided for two double seats.

4.2.4.3. Class III:

Vehicles designed and constructed exclusively for the carriage of seated passengers.

4.2.4.4. Class A:

Vehicles designed and constructed to carry standing passengers; a vehicle of this class has seats and may have provisions for standing passengers.

4.2.4.5. Class B:

Vehicles not designed and constructed to carry standing passengers; a vehicle of this class has no provision for standing passengers.

Comment: Necessary here?

4.3. CATEGORY N - POWER-DRIVEN VEHICLES HAVING AT LEAST FOUR WHEELS FOR THE CARRIAGE OF GOODS

"Category N vehicle" means a motor vehicle with four or more wheels designed and constructed for the carriage of goods (see 3.1.13.) having an unladen vehicle mass of more than 550 kg (not including the mass of the batteries in case of electric vehicles) or an engine power higher than 15 kW.

Comment: New criteria necessary to avoid overlapping with L7

4.3.1. Category N<sub>1</sub>:

Vehicles having a maximum mass not exceeding 3.5 tonnes.

4.3.2. Category N<sub>2</sub>:

Vehicles having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes.

4.3.3. Category N<sub>3</sub>:

Vehicles having a maximum mass exceeding 12 tonnes.

4.4. CATEGORY O - TRAILERS (INCLUDING SEMITRAILERS)

4.4.1. Category O<sub>1</sub>:

Trailers with a maximum mass not exceeding 0.75 tonnes.

4.4.2. Category O<sub>2</sub>:

Trailers with a maximum mass exceeding 0.75 tonnes, but not exceeding 3.5 tonnes.

4.4.3. Category O<sub>3</sub>:

Trailers with a maximum mass exceeding 3.5 tonnes, but not exceeding 10 tonnes.

4.4.4. Category O<sub>4</sub>:

Trailers with a maximum mass exceeding 10 tonnes.

4.4.5. Furthermore, trailers of categories O<sub>2</sub>, O<sub>3</sub> and O<sub>4</sub> are of one of the three following types:

4.4.5.1. 'Semitrailer':

A towed vehicle, in which the axle(s) is (are) positioned behind the centre of gravity of the vehicle (when uniformly loaded), and which is equipped with a connecting device permitting horizontal and vertical forces to be transmitted to the towing vehicle. One or more of the axles may be driven by the towing vehicle.

4.4.5.2. 'Full trailer':

A towed vehicle having at least two axles, and equipped with a towing device which can move vertically (in relation to the trailer) and controls the direction of the front axle(s), but which transmits no significant static load to the towing vehicle. One or more of the axles may be driven by the towing vehicle.

4.4.5.3. 'Centre-axle trailer':

A towed vehicle, equipped with a towing device which cannot move vertically (in relation to the trailer) and in which the axle(s) is (are) positioned close to the centre of gravity of the vehicle (when uniformly loaded) such that only a small static vertical load, not exceeding 10 per cent of that corresponding to the maximum mass of the trailer or a load of 1,000 daN (whichever is the lesser) is transmitted to the towing vehicle. One or more of the axles may be driven by the towing vehicle.

4.5. Special purpose vehicle:

Special purpose vehicles belong either to category M, N or O for conveying passengers or goods and have to fulfil the requirements of these categories wherever appropriate. A vehicle qualifies as special purpose vehicle if it fulfils an additional function for which special body arrangements and/or equipment are necessary. The following list is not exclusive.

4.5.1. Motor caravan (SA):

Comment: See the modification in 3.3.3, suggested to avoid confusion with two types of "special purpose vehicles" as currently in R.E.3.

M<sub>1</sub> vehicle with accommodation space which contains at least the following rigidly fixed equipment:

- (i) seats and a (possibly removable) table
- (ii) sleeping accommodation which may be converted from the seats
- (iii) cooking facilities, and
- (iv) storage facilities

4.5.2. Armoured vehicle (SB):

Vehicle with anti-bullet armour plating.

4.5.3. Ambulance (SC):

Vehicle for the transport of sick or injured people.

4.5.4. Hearse (SD):

Vehicle for the transport of deceased people.

4.6. CATEGORY T - AGRICULTURAL AND FORESTRY TRACTORS

'Agricultural and forestry tractor':

A power-driven vehicle, either wheeled or track-laying, which has at least two-axles, whose function depends essentially on its tractive power, and which is specially designed and constructed to pull, push, carry or actuate certain implements, machines or trailers intended for use in agriculture or forestry. Such a tractor may be arranged to carry a load and attendants.

Comment: Shall agricultural and forestry trailers be included in the future?

4.7. CATEGORY G - OFF-ROAD VEHICLES

4.7.1. Definition.

Off-road vehicles belong either to category M or to category N and have to fulfil the requirements of these categories unless it is otherwise stated in a specific Regulation. A vehicle qualifies as an off-road vehicle if it fulfils the following requirements relevant to the respective category.

4.7.1.1. Vehicles in category N<sub>1</sub> with a maximum mass not exceeding 2 tonnes and all vehicles in category M<sub>1</sub> are considered to be off-road vehicles if they have:

at least one front axle and at least one rear axle designed and constructed to be driven simultaneously, including where the drive to one axle can be disengaged;

at least one differential locking mechanism or at least one mechanism having a similar effect and

if they can climb a 30 per cent gradient calculated for a solo vehicle.

Comment: Necessary?

In addition, they must satisfy a least five of the following six requirements:

the approach angle must be at least 25 °;  
the departure angle must be at least 20 °;  
the ramp angle must be at least 20 °;  
the ground clearance under the front axle must be at least 180 mm;  
the ground clearance under the rear axle must be at least 180 mm;  
the ground clearance between the axles must be at least 200 mm.

4.7.1.2. Vehicles in category N<sub>1</sub> with a maximum mass exceeding 2 tonnes or in category N<sub>2</sub>, M<sub>2</sub> or M<sub>3</sub> with a maximum mass not exceeding 12 tonnes are considered to be off-road vehicles either if all their wheels are designed and constructed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged, or if the following three requirements are satisfied:

at least one front axle and at least one rear axle are designed and constructed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged;

there is at least one differential locking mechanism or at least one mechanism having a similar effect;

they can climb a 25 per cent gradient calculated for a solo vehicle.

4.7.1.3. Vehicles in category M<sub>3</sub> with a maximum mass exceeding 12 tonnes or in category N<sub>3</sub> are considered to be off-road either if the wheels are designed and constructed to be driven simultaneously, including vehicles where the drive to one axle can be disengaged, or if the following requirements are satisfied:

at least half the wheels are driven;

there is at least one differential locking mechanism or at least one mechanism having a similar effect;

they can climb a 25 per cent gradient calculated for a solo vehicle;

at least four of the following six requirements are satisfied:

the approach angle must be at least 25 °;  
the departure angle must be at least 25 °;  
the ramp angle must be at least 25 °;

the ground clearance under the front axle must be at least 250 mm;  
the ground clearance between the axles must be at least 300 mm;  
the ground clearance under the rear axle must be at least 250 mm.

4.7.2. Load and checking conditions.

4.7.2.1. Vehicles in category  $N_1$  with a maximum mass not exceeding two tonnes and vehicles in category  $M_1$  must be in running order, namely with coolant fluid, lubricants, fuel, tools, spare-wheel and a driver considered to weigh a standard 75 kilograms.

4.7.2.2. ~~Power driven~~ Motor vehicles other than those referred to in paragraph 4.7.2.1 ~~6.2.1.~~ must be loaded to the technically permissible maximum mass stated by the manufacturer.

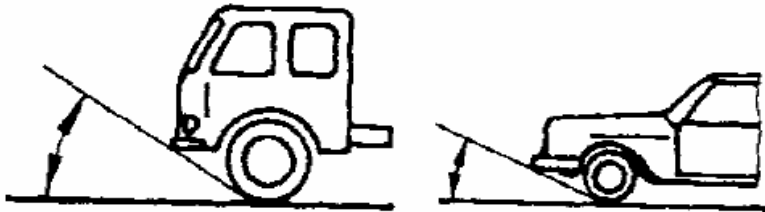
Comment: Where is that in the latest version of R.E.? 7.2.1.?

4.7.2.3. The ability to climb the required gradients (25 per cent and 30 per cent) is verified by simple calculation. In exceptional cases, however, the technical services may ask for a vehicle of the type concerned to be submitted to it for an actual test.

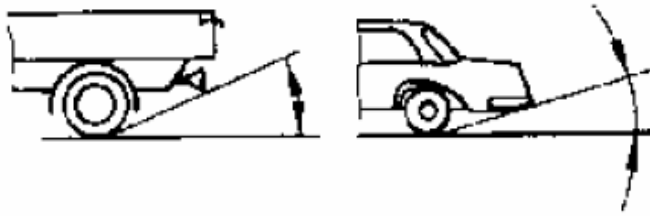
4.7.2.4. When measuring front and rear incidence angles and ramp angles, no account is taken of underrun protective devices.

4.7.3. Definitions and sketches of front and rear incidence angles, ramp angle and ground clearance.

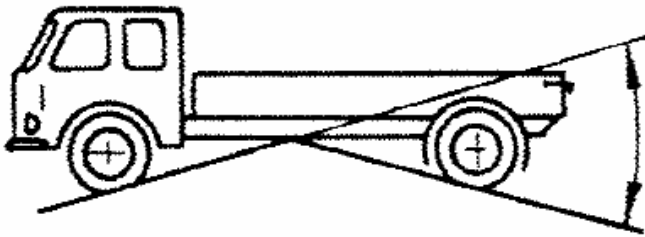
4.7.3.1. 'Approach angle' - see Standard ISO 612:1978, term No. 6.10.



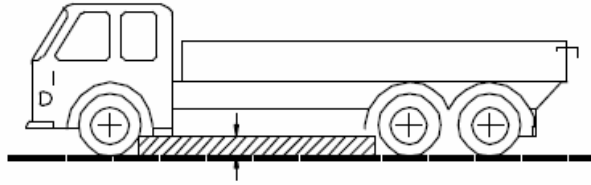
4.7.3.2. 'Departure angle' - see Standard ISO 612:1978, term No. 6.11.



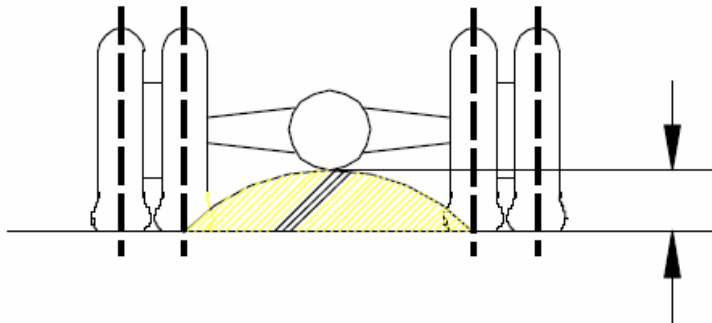
4.7.3.3. 'Ramp angle' - see Standard ISO 612:1978, term No. 6.9.



- 4.7.3.4. "Ground clearance between the axles" means the shortest distance between the ground plane and the lowest fixed point of the vehicle. Multi-axle bogies are considered to be a single axle.



- 4.7.3.5. "Ground clearance beneath one axle" means the distance beneath the highest point of the arc of a circle passing through the centre of the tyre footprint of the wheels on one axle (the inner wheels in the case of twin tyres) and touching the lowest fixed point of the vehicle between the wheels. No rigid part of the vehicle may project into the shaded area of the diagram. Where appropriate, the ground clearance of several axles is indicated in accordance with their arrangement, for example 280/250/250.



- 4.4.7.4. Combined designation.

Symbols M and N may be combined with symbol G.  
For example, a vehicle of category  $N_1$  which is suited for off-road use may be designated as  $N_1G$ .

5. OTHER DEFINITIONS

To be developed later.

6. INTERPRETATION RULES

6.1. References to R.E.3 and to this Regulation :

6.1.1. All references made to vehicle categories and sub-categories of any version of R.E.3 Annex 7 are replaced by a reference to the same vehicle (sub-) categories of the latest version of this Regulation.

Comment: Necessary to avoid the need for adaptation of all the Regulations each time the Horizontal Regulation is modified. Differing of vehicle categories and cumbersome checking of old R.E.3-versions when applying the Reg. can only be avoided this way.

6.1.2. Future Regulations and amendments will refer to the vehicle categories and sub-categories of this Regulation exclusively.

6.1.3. The reference to this Regulation is always a reference to this Regulation as last amended unless otherwise specified.

6.2. Modifications of categories and sub-categories:

6.2.1. When existing vehicle sub-categories (like M<sub>1</sub> and N<sub>2</sub>) are modified by an amendment to this Regulation, type approvals issued before the entry into force of the amendment cover both to the vehicle sub-category as amended and to the vehicle sub-category without amendment.

6.2.2. Type approvals issued before a new sub-category has been effectively introduced by this Regulation cover the newly introduced sub-categories only in as much as the vehicles of these new sub-categories were formerly covered by other sub-categories of the same category.

6.3. Introduction of L<sub>6</sub> and L<sub>7</sub>:

6.3.1. In as much as a Regulation covers all vehicles of category L, those of subcategory L<sub>6</sub> and L<sub>7</sub> shall fulfil the technical requirements of L<sub>2</sub> and L<sub>5</sub> respectively unless otherwise specified.

6.3.2. Type approvals for vehicles of category L include vehicles of sub-category L<sub>6</sub> and L<sub>7</sub> only if

- issued after X.Y.2006 or
- the Regulation referred to in the type approval covered explicitly these sub-categories when the type approval was issued.

Comment: (entry into force of this Horizontal Regulation)

Comment: As explained in the introductory note, a Regulation must explicitly mention these sub-categories or refer to a version of R.E.3 that included already these sub-categories.