



**Economic and Social
Council**

Distr.
GENERAL

TRANS/WP.29/1045
15 September 2005

ENGLISH
Original: ENGLISH AND FRENCH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

SPECIAL RESOLUTION No. 1

CONCERNING THE COMMON DEFINITIONS OF VEHICLE CATEGORIES,
MASSES AND DIMENSIONS (S.R. 1)

Note: The text reproduced below was adopted on 22 June 2005 by the Executive Committee (AC.3) of the Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles (ECE/TRANS/132 and Corr.1). It is based on document TRANS/WP.29/2005/21, as amended by AC.3 at its fourteenth session (TRANS/WP.29/1041, paras. 84 and 85).

TABLE OF CONTENTS

	<u>Page</u>
PREAMBLE	3
A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION	4
B. SPECIAL RESOLUTION CONCERNING COMMON DEFINITIONS AND PROCEDURES TO BE USED IN GLOBAL TECHNICAL REGULATIONS (S.R. 1)	11
1. SCOPE	11
2. GENERAL PROVISIONS	11
3. SPECIFIC PROVISIONS	12
ANNEXES	
<u>Annex 1</u> General Definitions	13
<u>Annex 2</u> Categorization of Vehicles	14
<u>Annex 3</u> Masses	17
<u>Annex 4</u> Dimensions	19

PREAMBLE

THE EXECUTIVE COMMITTEE OF THE 1998 AGREEMENT,

DESIRING to establish global technical regulations ensuring high levels of safety, environmental protection, energy efficiency and anti-theft performance of Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles,

BEARING IN MIND that an Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles was opened for signature at Geneva on 25 June 1998,

BEARING IN MIND that global technical regulations will facilitate the trade of wheeled vehicles, equipment and parts with harmonized performance requirements among the Contracting Parties,

BEARING IN MIND that the Executive Committee (AC.3) of the 1998 Agreement has decided to have the set of common definitions as Special Resolution 1 (S.R. 1),

BEARING IN MIND that this S.R. 1 setting forth common definitions to be used in the global technical regulations is necessary for the development of the global technical regulations,

BEARING IN MIND that this resolution shall not alter the regulations of Contracting Parties unless so adopted by the Contracting Party.

RECOMMENDS the Working Parties, in drafting prospective global technical regulations, to use the harmonized definitions for vehicle categories, masses and dimensions contained in this S.R. 1.

A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

At the one-hundred-and-twentieth session of WP.29, the Government of Japan, through document TRANS/WP.29/2000/39, presented a proposal concerning the necessity of establishing common definitions to facilitate the formulation of future global technical regulations (gtrs), selecting vehicle category, vehicle weight, and vehicle dimension as candidate items requiring a common definition. The necessity of common definitions was unanimously recognized at the WP.29 session and, in October 2000, an informal group was formed under the Working Party on General Safety Provisions (GRSG) and Japan volunteered to chair the effort. This "Common Tasks Group" was assigned to develop global common definitions within two years, which would be presented to WP.29 for approval for use in future gtrs.

This S.R. 1 applies to all wheeled vehicles, equipment and parts falling within the scope of the Agreement Concerning the Establishing of Global Technical Regulation for Wheeled Vehicles, Equipment and Parts, which can be fitted and/or be used on Wheeled Vehicles. The establishment of the definitions of categories, masses and dimensions of vehicles will help to establish gtrs that internationally improve the safety and environmental protection features of automobiles, and that will reduce development and manufacturing costs as well as the cost to consumers.

This resolution does not contain performance requirements as listed under Article 4 of the 1998 Agreement, therefore it does not trigger the obligations of Article 7 requiring Contracting Parties to initiate procedures for adopting gtrs.

The first Common Tasks Group meeting was held on 16-17 October 2000, where its future work schedule was approved. The three above-mentioned items of common definition were proposed as high-priority candidate items for drafting future gtrs and were approved, although it was understood that common definitions would not necessarily be confined to those three items. Then, the definitions of vehicle categories, weight, and dimensions of the United States of America, European Union, and Japan were compared on the basis of summary data prepared by the Government of Japan, and the existence of differences in definitions was acknowledged.

There were distinct philosophy differences in vehicle definitions among the regulations of European Union, Japan and the United States of America. As an example, the distinctions between passenger cars and trucks made by Japanese and European Union regulations are based on the quantitative comparisons between the relative accommodations for passengers and cargo in a given vehicle (e.g., comparisons of passenger mass to cargo mass or passenger space to cargo space). The distinctions between passenger cars and trucks made in the regulations of the United States of America are based on qualitative definitions (e.g., for "transportation of property or special purpose equipment or constructed on a truck chassis or with special features for occasional off-road use"). Specifically, the major differences are as shown in the three tables below:

1. Summarized Comparison of Vehicle Categories between Japan, Europe and the United States of America

Categories	Japan	Europe	United States of America
Passenger Car	Passengers of 10 or less	Passengers of 9 or less (M1)	Passengers of 10 or less (Passenger Car) (MPV: truck chassis or off-road use)
Bus	Passengers of 11 or more	Passengers of 10 or more M2:GVM≤5t M3:GVM>5t	Passengers of 11 or more
Truck	Quantitative Definition Floor area (Passenger < Cargo) Weight (Passenger < Payload) Loading/Unloading openings (dimension / area)	Qualitative Definition ("designed and constructed for the carriage of goods") N1:GVM≤3.5t N2:GVM≤3.5t–12t N3:GVM>12t *Each country has different criteria.	Qualitative Definition ("carrying load or commercial goods")

2. Summarized Comparison of Definitions of Gross Vehicle Weight / Masses */ between Japan, Europe and the United States of America

Equipment		Japan	Europe	United States of America
Vehicle Weight/ Mass	Spare wheel, Jack/ tools	uninstalled	installed	installed
	Optional Equipment	uninstalled	installed	installed
	Oil/Water	Full	Full	Full
	Fuel	100%	90%	100%
Passenger weight/mass		55 kg/person	75 kg/person	68 kg/person
Gross Vehicle Weight/Mass		(VW+55kg×n+PL) VW: Vehicle Weight n: Passenger Number PL : Pay Load	GVM (Permissible Vehicle Mass)	GVWR (Permissible Vehicle Weight)

*/ Some Contracting Parties use the term "Weight".

3. Summarized Comparison of Definitions of Vehicle Dimensions between Japan, Europe and the United States of America

Dimension	Japan	Europe	United States of America
Length	Spare wheel uninstalled	Spare wheel installed	Spare wheel Installed
Width	Lamps installed	Lamps uninstalled	Lamps Uninstalled

As for off-road vehicles, the group decided to wait for discussion until the draft gtr for off-road vehicles is formulated.

The second Common Tasks Group meeting was convened on 2-3 April 2001. Before discussion of specific common definitions, a set of guidelines for providing basic orientation to the work of the Common Tasks Group was proposed, and consensus was reached that common definitions be formulated in accordance with the following guidelines:

1. "Common definitions" shall be developed as basic elements for use in gtrs and shall not alter the current regulations of Contracting Parties.
2. "Common definitions" shall be developed from the technical point of view and shall not necessarily be linked to any social systems such as taxation, driving licence, etc.
3. Only "Common definitions" for basic terms necessary to define the vehicle categories and characteristics of obvious use in the formulation of gtrs shall be developed based on present-day definitions of Contracting Parties and relevant international standards.
4. Procedures for developing "Common definitions" shall be developed.

At the second Common Tasks Group meeting there were divided opinions on the above guideline No. 2, in particular, as to whether or not vehicle categories for gtrs should reflect the vehicle categorizations employed in the taxation, insurance, and other social systems of various nations. Finally, it was agreed to recommend the establishment of vehicle categories for gtrs from a technical standpoint independent from any social systems, mainly because it is difficult to reflect the different social systems of all nations. For vehicle weight and dimensions, elements subject to definition were selected for discussion at the next meeting. For vehicle categories, after debating on the basis of the summary data, the discussions on elements subject to definition were continued at the next meeting.

Prior to the third Common Tasks Group meeting, a small group meeting was organized in Tokyo to produce a merits-demerits table on various vehicle categorizations. One view was that it would not be necessary to define vehicle categories if they were established as test conditions. In opposition, clear defining vehicle categories were advocated to preclude the divergent interpretations of vehicle categories by nations. The establishment of common definitions for vehicle categories was favoured.

The third Common Tasks Group meeting was held on 8-9 October 2001, where two draft proposals were presented on the common definitions of vehicle weight and dimensions. The minimum necessary elements were agreed for recommendation in accordance with the previously established guidelines. Many expressed opinions on vehicle categories.

There was support for a proposal to categorize vehicles as passenger vehicles and commercial vehicles, the passenger vehicles being further classified into passenger cars, small buses, and large buses according to their Gross Vehicle Weight (GVW) (buses being 3.5 t or over), while commercial vehicles were classified as small, medium, and large commercial vehicles according to their (GVW). There was also support for a plan to categorize vehicles into passenger cars and commercial vehicles by number of passengers, commercial vehicles being further categorized into small commercial vehicles and large commercial vehicles by (GVW). Similarly, there was support to categorize commercial vehicles as small, medium and large according to their (GVW). Additionally, there were comments that vehicles should not be defined by categories but only according to their parameter characters, details being defined by individual gtrs.

These comments were discussed and it was agreed to recommend that vehicles will be defined based on minimum necessary requirements; these categories are passenger car, bus, and commercial vehicle, with the commercial vehicle category further divided into the sub-categories of small, medium and large commercial vehicles. This recommendation was based on the Resolution on the Construction of Vehicles (R.E.3). In addition, it was planned that the two proposed drafts on the common definitions of vehicle categories, weight, and dimensions would be combined by January 2002.

In order to advance discussion on the combined draft proposal prior to the fourth Common Tasks Group meeting, a preliminary meeting was conducted in Ottawa on 4 April 2002. Prior to this meeting, copies of the combined draft proposal were distributed to the members, and comments were received.

The action taken in response to major comments are listed as follows:

There was a proposal to clarify the purpose of the Common Tasks, define "special-purpose vehicles" as another category, and define "pay mass" more clearly. A provision to define "special-purpose vehicles" in individual regulations of the Contracting Parties was inserted.

Another comment was to define "unladen mass" more clearly and clarify where to define Gross Vehicle Mass (GVM) and Gross Technical Mass (GTM). Additionally, GTM was further defined. The draft was amended to that effect.

There were also comments with regard to the definition of seating positions. It was agreed to recommend that all seating positions supported by a seat anchorage be used to determine vehicle category.

There was a proposal to make a further inquiry about the naming of categories and how to define the number of passengers in a mathematical formula. As for the names of categories, the proposed names were agreed to be recommended for adoption due to a lack of more appropriate ones. A formula to calculate the number of passengers was not agreed on.

A proposal was made to clarify the definitions of weights and sizes. The draft was revised to that effect.

Conclusions and reasons for major comments are as follows:

At the Ottawa preliminary meeting, it was agreed to recommend the amended combined draft proposal, except for the following points that would be carried over to the fourth Common Tasks Group meeting: (a) whether category naming be in numbers or in abbreviated letters, (b) feasibility of allowing Contracting Parties to propose another breakpoint(s) in sub-categories of commercial vehicles for environmental or safety reasons in addition to the basic breakpoint of 3.5 tons, (c) feasibility of eliminating the breakpoint of 7.5 tons, (d) feasibility of introducing a common definition of seating positions to clarify the passenger seating capacity of the vehicle.

As for vehicle dimensions, although there were differing opinions on whether to include the lamps, tyres, and other components attached to the vehicle body, it was agreed to recommend both "Overall" and "Structural" dimensions, since two types of gtrs would be formulated, one based on the outermost dimensions of the vehicle and the other based on the external panel dimensions of the vehicle. These dimensions were prepared in consideration of ISO.

The fourth Common Tasks Group meeting was convened on 29-30 April 2002. In consequence of the outcome of the Ottawa preliminary meeting, it was agreed to recommend the draft, except for five unresolved issues. A small group was formed to deal with the pending issues listed below, after it was agreed to recommend that Category 1 represent passenger cars, Category 2 commercial vehicles, and Category 3 two-wheeled vehicles.

Pending Issues

- 1) Sub-categorization of Category 2 by mass
- 2) Minimum loading capacity for Category 2
- 3) Seating positions for determining the number of passengers
- 4) Definition of a special-purpose vehicle
- 5) Definition of a motorcycle.

At the subsequent small-group meeting, an agreement for recommendation was reached on the above issues 2), 4), and 5); however, issues 1) on sub-categorization by mass and 3) on seating positions remained unresolved and were to be brought to the final Common Tasks Group meeting.

The fifth Common Tasks Group meeting was held on 15-16 October 2002, where discussions were focused primarily on the remaining issues 1) and 3) and a new two-wheeled vehicle issue. The results were as follows:

1) Seating Positions

Seating positions are defined differently among the United States of America, the European Union, and Japan. It was proposed that seating positions be defined by the number of safety belt anchorages. It was pointed out that there is the inability to determine the number of passengers on a bench seat using the proposed definition. An alternative of defining the number of seating positions based on the width of a bench seat was discussed. Consensus could not be reached. Further discussion on the defining of seating positions are recommended to be suspended until a gtr related to seats is formulated. With respect to the number of passengers on a bench seat, it is possible that a vehicle may be placed in different categories depending on the definition of seating capacity for bench seats. All seating positions supported by a seat anchorage are used to determine the vehicle category. The group believes that since vehicle manufacturers will most likely try to achieve compliance with the most stringent regulation in order to export to the greatest possible number of nations, problems will not arise if the defining of seating positions is suspended.

2) Breakpoints in Category 2

Discussions were aimed at unifying the breakpoint of 3.5 tons under the 1958 Agreement and the 3.9/4.5 (8500/10000 lbs) tons in the United States of America regulations, but the Common Tasks Group failed to provide technical rationales for realizing the necessary unification. It was therefore agreed to recommend that breakpoints be established on the basis of technical rationales when gtrs are formulated. To prevent the number of breakpoints from increasing excessively, it is suggested that future breakpoint(s) be selected from 3.5 or 4.5 tons for safety regulations and from 3.5 or 3.9 tons for environmental regulations. Furthermore, it was agreed to recommend that if a common breakpoint is adopted in a number of gtrs, this breakpoint may be established as a formal common breakpoint in the gtr on Vehicle Definitions.

3) Power driven vehicles with two or three wheels

The maximum speed for the vehicles was tentatively recommended at 50 km/h. In addition, a note would be appended to this decision that "the European Union has entered a study reservation on the maximum speed of category 3-1 vehicles". Other pending issues concerning two-wheeled vehicles were resolved.

Summary: As a result, the Common Tasks Group agreed to recommend the Special Resolution on Vehicle Definitions. Although editorial comments were presented and the draft was accordingly modified, the wording of the draft basically remained to respect the recommendation reached by the Common Tasks Group. Any issues that may be brought in the future concerning the draft shall be discussed in a new setup.

Japan submitted the proposal TRANS/WP.29/2003/17 to the one-hundred-and-twenty-ninth session of WP.29 as the proposal of the draft gtr, followed by the United States of America proposal TRANS/2003/WP29/2003/51. Taking into consideration the United States of America proposal, Japan at the eighth session of the Executive Committee (AC.3) of the 1998 Agreement, proposed that the draft gtr should have the administrative status of the Resolution. AC.3 agreed on the proposed principal and decided that GRSG should prepare the technical work.

Under these circumstances, Japan proposed TRANS/WP.29/2003/17/Rev.1 to the one-hundred-and-thirty-first session of WP.29. Furthermore, TRANS/WP.29/GRSG/2003/10 was revised based on TRANS/WP.29/2003/17/Rev.1. GRSG, at its eighty-fifth session, adopted with some modification TRANS/WP.29/GRSG/2003/10/Rev.1 and submitted TRANS/WP.29/2004/25 to WP.29 and AC.3.

AC.3, at its eleventh session, studied these documents and decided that the proposal (TRANS/WP.29/2004/25) would be considered as Special Resolution No. 1 (S.R.1). The new title of the resolution is "Special Resolution No. 1 concerning common definitions of vehicle categories, masses and dimensions (S.R.1)", to be resolved under the 1998 Agreement concerning the establishing of Global Technical Regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles. The representative of Japan volunteered to prepare a revised document for WP.29 and AC.3, hoping it would be approved as S.R.1.

The Government of Japan believes that the successful harmonization of definitions for vehicle categories, weight and dimensions contribute to the progress of gtrs, and encourages the formulation of gtrs and their adoption by Contracting Parties. Gtrs will facilitate the distribution of vehicles having the harmonized performance requirements among Contracting Parties, enabling work simplification and cost reduction in the design and production of vehicles.

B. SPECIAL RESOLUTION CONCERNING COMMON DEFINITIONS AND PROCEDURES TO BE USED IN GLOBAL TECHNICAL REGULATIONS (S.R. 1)

1. SCOPE

1.1. This document contains the definitions of common terms to be used for the development of global technical regulations (gtr) that apply to all wheeled vehicles, equipment and parts falling within the scope of the Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles (ECE/TRANS/132 and Corr.1).

1.2. The definitions of common terms in this document are not necessarily to be used in the vehicle technical regulation of each Contracting Party.

2. GENERAL PROVISIONS

2.1. When drafting or amending the provisions of any gtr, Contracting Parties to the 1998 Agreement shall draft that gtr or any amendments in accordance with the provisions of this resolution.

2.2. Contracting Parties may continue to apply their national or regional definitions and procedures which are equivalent to the categories specified in this resolution and as exceptions to the application of gtrs 1/.

2.3. Where, in drafting new or amended gtrs, the need becomes apparent to create new definitions that are likely to be used in more than one gtr, consideration shall be given to placing them in this S.R. 1.

2.4 Amendments to S.R. 1

2.4.1 Amending S.R. 1 shall be pursuant to the procedure prescribed in paragraph 6.4., Article 6 of the 1998 Agreement.

2.4.2 The Contracting Party, which proposes the amendments of the S.R. 1, shall also submit the amendment proposals relating to the definitions of all gtrs currently in force.

2.5. Unless otherwise stated any unit of measurement and associated symbol referenced in a gtr shall be an International System of Units (SI) unit conforming to International Organization for Standardization (ISO) Standard 1000:1992.

1/ The scope of national or regional implementation can thus vary slightly from the scope of the gtr. e.g., Contracting Parties may implement a gtr for vehicles of category M1 according to the 1958 Agreement instead of category 1-1 according to S.R. 1.

3. SPECIFIC PROVISIONS

3.1. References in gtrs to general definitions shall be in accordance with Annex 1.

3.2. References in gtrs to categories of vehicles shall be in accordance with Annex 2.

3.3. References in gtrs to masses of vehicles shall be in accordance with Annex 3.

3.4. References in gtrs to dimensions of vehicles shall be in accordance with Annex 4.

Annex 1

GENERAL DEFINITIONS

1. "Power driven vehicle" means any self-propelled vehicle designed and constructed to be used on the road and having at least two wheels.
2. "Trailer" means any non-self propelled vehicle, which is designed and constructed to be towed by a power driven vehicle;
3. "Vehicle" means any power driven vehicle or trailer;
4. "Vehicle combination" means any ensemble constituted by a power driven vehicle coupled to one or more trailer(s);
5. "Articulated vehicle" means a vehicle which consists of two or more rigid sections which articulate relative to one another; the passenger compartments of each section intercommunicate so that passengers can move freely between them; the rigid sections are permanently connected so that they can only be separated by an operation involving facilities which are normally only found in a workshop;
6. "Incomplete vehicle" means any vehicle, which requires undergoing at least one further stage of completion before being ready for the purpose for which it has been designed and constructed;
7. "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.

Annex 2

CATEGORIZATION OF VEHICLES

For the purpose of gtrs, vehicles shall be classified on the basis of their design and construction features.

1. POWER DRIVEN VEHICLES WITH FOUR OR MORE WHEELS

1.1. "Category 1 vehicle" means a power driven vehicle with four or more wheels designed and constructed primarily for the carriage of (a) person(s).

1.1.1. "Category 1-1 vehicle" means a category 1 vehicle comprising not more than eight seating positions in addition to the driver's seating position. A category 1-1 vehicle cannot have standing passengers.

1.1.2. "Category 1-2 vehicle" means a category 1 vehicle designed for the carriage of more than eight passengers, whether seated or standing, in addition to the driver.

1.2. "Category 2 vehicle" means a power driven vehicle with four or more wheels designed and constructed primarily for the carriage of goods. This category shall also include:

- i) tractive units
- ii) chassis designed specifically to be equipped with special equipment.

1.3. To determine whether a vehicle is to be regarded as a category 1 vehicle or a category 2 vehicle for the application of gtrs, the following shall apply in cases where it is not immediately apparent whether a vehicle is a category 1 or 2 vehicle:

1.3.1. If a vehicle meets all of the following conditions:

$$P - (M + N \times 68) > N \times 68,$$

$$N \leq 6 \text{ and}$$

Pay mass as defined in paragraph 7. of Annex 3 exceeds 150 kg for the vehicle, as configured with the maximum mass of factory fitted optional equipment, the vehicle shall be deemed to be a category 2 vehicle.

In all other cases, the vehicle shall be deemed to be a category 1 vehicle.

Where,

P = Gross vehicle mass as defined in paragraph 4 of Annex 3.

M = Mass in running order as defined in paragraph 3 of Annex 3.

N = Maximum number of simultaneous seating and standing positions excluding the driver seating position

1.3.2. If there is a seat anchor for a removable seat, the removable seat is to be counted in the determination of the number of seating positions and of the pay mass. Seating position means any individual seat or any part of a bench seat intended to seat one person.

1.3.3 Until there is a future action that resolves this issue, Contracting Parties can use their own criteria to decide the number of seating positions.

1.4. "Special Purpose vehicle" means a vehicle sharing features with a vehicle of category 1 or 2 for performing a special function for which special body arrangement and/or equipment are necessary. Features shared with a category 1 or 2 vehicle shall be covered by the respective gtr.

Definition and requirements of the Special Purpose part of the vehicle will be decided by each Contracting Party where the vehicle is to be registered.

2. POWER DRIVEN VEHICLES WITH TWO OR THREE WHEELS

2.1. "Category 3 vehicle" means a power driven vehicle with 2 or 3 wheels designed and constructed for the carriage of persons and/or goods.

2.1.1. "Category 3-1 vehicle: two-wheeled moped" means 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 1/.

2.1.2. "Category 3-2 vehicle: three-wheeled moped" means 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.

2.1.3. "Category 3-3 vehicle: two-wheeled motorcycle" means 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.

2.1.4. "Category 3-4 vehicle: tricycle" means 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 50 km/h.

1/ The European Commission has entered a study reservation on the maximum speed of category 3-1 vehicles.

2.1.5. "Category 3-5 vehicle: motorcycle with sidecar" means 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.

3. TRAILERS (INCLUDING SEMI-TRAILERS)

To be developed.

Annex 3

MASSES

For the purpose of global technical regulations:

1. All masses shall be expressed in kilograms (kg).
2. "Unladen Vehicle Mass" means the nominal mass of a complete vehicle as determined by the following criteria:
 - 2.1. Mass of the vehicle with bodywork and all factory fitted equipment, electrical and auxiliary equipment for normal operation of vehicle, including liquids, tools, fire extinguisher, standard spare parts, chocks and spare wheel, if fitted.
 - 2.2. The fuel tank shall be filled to at least 90 per cent of rated capacity and the other liquid containing systems (except those for used water) to 100 per cent of the capacity specified by the manufacturer.
3. "Mass in running order" means the nominal mass of a vehicle as determined by the following criteria:

Sum of unladen vehicle mass and driver's mass. The driver's mass is applied in accordance with paragraph 6.1. below.

In the case of category 1-2 vehicles, additional crewmembers for which seating positions are provided shall be included, their mass being equal to, and incorporated in the same way as, that of the driver.
4. "Gross vehicle mass" of a vehicle means the maximum mass of the fully laden solo vehicle, based on its construction and design performances, as declared by the manufacturer. This shall be less than or equal to the sum of the maximum axles' (group of axles) capacity.
5. "Gross Train Mass" of a power driven vehicle means the technically permissible maximum mass of the laden vehicle combination, as declared by the manufacturer of the towing vehicle.
6. Occupant mass
 - 6.1. "Driver Mass" means the nominal mass of a driver that shall be 75 kg (subdivided into 68 kg occupant mass at the seat and 7 kg luggage mass in accordance with ISO standard 2416-1992).

- 6.2. "Passenger mass" means the nominal mass of a passenger that shall be 68 kg except:

in the case of Category 1-1 vehicle, where each passenger must additionally have 7 kg provision for luggage which shall be located in the luggage compartment(s) in accordance with ISO standard 2416–1992.

in the case of category 1-2 vehicles not designed to carry standing passengers, where each passenger must have 3 kg additional provision for hand baggage.

7. "Pay mass" means the goods-carrying capacity of the vehicle which is the figure obtained by subtracting the unladen vehicle mass and the driver and passenger masses from the gross vehicle mass.
8. "Maximum towable mass" means the maximum mass capable of being towed by a vehicle as defined by the vehicle manufacturer.
9. "Maximum axle (group of axles) capacity" means the permissible mass corresponding to the maximum mass to be carried by the axle (group of axles) as defined by the vehicle manufacturer, not exceeding the axle manufacturer's specifications. The maximum axle (group of axles) capacity shall be less than or equal to the sum of the maximum capacities of the tyres.
10. "Maximum tyre capacity" means the permissible mass corresponding to the maximum mass to be carried by the tyre as defined by the vehicle manufacturer, not exceeding the tyre manufacturer's specifications.

Annex 4

DIMENSIONS

All Dimensions shall be determined with the vehicle at its unladen vehicle mass
For the purpose of global technical regulations:

1. Vehicle length
 - 1.1. "Structural length" means a dimension which is measured according to ISO standard 612-1978, term No 6.1. In addition to the provisions of that standard, when measuring the vehicle structural length the following devices shall not be taken into account:
 - wiper and washer devices,
 - front or rear marker-plates,
 - customs sealing devices and their protection,
 - devices for securing the load restraint(s)/cover(s) and their protection,
 - lighting and light signalling devices,
 - mirrors or other devices for indirect vision,
 - reversing aids,
 - air-intake pipes,
 - length stops for demountable bodies,
 - access steps and hand-holds,
 - ram rubbers and similar equipment,
 - lifting platforms, access ramps and similar equipment in running order, not exceeding 300 mm,
 - coupling and recovery towing devices for power driven vehicles,
 - trolleybus current collection devices in their elevated and retracted positions,
 - external sun visors,
 - de-mountable spoilers,
 - exhaust pipes.
 - 1.2. "Overall length" means a dimension so as to take the devices mentioned in paragraph 1.1. into account.
2. Vehicle width
 - 2.1. "Structural width" means a dimension which is measured according to ISO standard 612-1978, term No. 6.2. In addition to the provisions of that standard, when measuring the vehicle structural width the following devices shall not be taken into account:
 - customs sealing devices and their protection,
 - devices for securing the tarpaulin and their protection,
 - tyre failure tell-tale devices,
 - protruding flexible parts of a spray-suppression system,
 - lighting and light signalling devices,

- for buses, access ramps, lifting platforms and similar equipment in their stowed position.
- rear-view mirrors or other devices for indirect vision,
- tyre-pressure indicators,
- retractable steps,
- the deflected part of the tyre walls immediately above the point of contact with the ground,
- external lateral guidance devices of guided buses,
- running boards,
- de-mountable mudguard broadening.

2.2. "Overall width" means a dimension so as to take the devices mentioned in paragraph 2.1. into account.

3. Vehicle height

3.1. "Structural height" means a dimension which is measured according to ISO standards 612-1978, term No. 6.3. In addition to the provisions of that standard, when measuring the vehicle structural height the following devices shall not be taken into account:

- aerials,
- current collection devices in their elevated position.

For vehicles with an axle-lift device, the effect of this device must be taken into account.

3.2. "Overall height" means a dimension so as to take the devices mentioned in paragraph 3.1. into account.

4. "Wheel base" means the distance between the perpendicular lines constructed to the longitudinal median plane (of the vehicle) from the previously defined points A or B corresponding to two consecutive wheels situated on the vehicle, according to ISO Standard 612-1978, term No.6.4.

5. "Track" corresponding to a real or imaginary axle is the sum of the two distances AH and BH in relation to the two wheels connected by this axle, AH and BH being the distances from points A and B defined in clause 5 to the longitudinal median plane (of the vehicle), according to ISO Standard 612-1978, term No. 6.5.

6. "Front overhang" means the distance between the vertical plane passing through the centres of the foremost wheels and the foremost point of the vehicle, taking into consideration lashing hooks, registration number plate, etc., and any parts rigidly attached to the vehicle, according to ISO Standard 612-1978, term No. 6.6.

7. "Rear overhang" means the distance between the vertical plane passing through the centres of the rearmost wheels and the rearmost point of the vehicle, taking into consideration the towing attachment, if fitted, registration number plate, etc., and any parts rigidly attached to the vehicle, according to ISO Standard 612-1978, term No. 6.7.
