UNITED NATIONS



# Economic and Social Council

Distr.

**GENERAL** 

TRANS/WP.29/GRSG/2003/10/Rev.1 31 July 2003

Original: ENGLISH

ENGLISH AND FRENCH ONLY

### ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

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

Working Party on General Safety Provisions (GRSG) (Eighty-fifth session, 21-24 October 2003, agenda item 9.)

PROPOSAL FOR A NEW CONSOLIDATED RESOLUTION ON: UNIFORM PROVISIONS SETTING FORTH COMMON DEFINITIONS AND PROCEDURES TO BE USED IN GLOBAL TECHNICAL REGULATIONS (gtr 0)

## Revision 1

## Transmitted by the Expert from Japan

Note: The text reproduced below has been prepared by the expert from Japan to develop a consolidated Resolution on "Uniform Provisions Setting Forth Common Definitions and Procedures to be used in Global Technical Regulations (gtr 0)". It is based on the text of document TRANS/WP.29/GRSG/10, which was considered by GRSG. It takes into account the amendments agreed during the eighty-fourth session of GRSG and the decision agreed during the eighth session of the Executive Committee(WP.29/AC.3), including those contained in a document distributed during the session without a symbol(informal document No. AC.3-1). The amended text of the document is marked in *bold* characters.

\_\_\_\_

Note: This document is distributed to the Experts on General Safety Provisions only.

GE.03-23089

The Contracting Parties of the 1998 Agreement accept the resolution on the following contents.

#### A. STATEMENT OF TECHNICAL RATIONALE AND JUSTIFICATION

At the one-hundred-and-twentieth 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 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 draft gtr 0 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 us 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.

While this document is identified as a gtr, it is not a gtr in the sense that it does not contain performance requirements as listed under Article 4 of the 1998 Agreement. Therefore, this document 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 by the Government of Japan 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 regulations. As an example, the distinctions between passenger cars and trucks made by Japanese and European Union regulation 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 United States

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

# 2. Summarized Comparison of Definitions of Gross Vehicle Weight between Japan, Europe and United States

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

<b>3.</b>	Summarized Comparison of Definitions of Vehicle Dimensions between Japan, Europe
	and United States

Dimension	Japan	Europe	United States
Length	Spare wheel	Spare wheel	Spare wheel
	uninstalled	installed	Installed
Width	Lamps	Lamps	Lamps
	installed	uninstalled	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, the Government of Japan proposed a set of guidelines for providing basic orientation to the work of the Common Tasks Group, and it was reached by consensus that common definitions be formulated in accordance with the following proposed 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 safety regulations shall be developed based on present-day definitions of contracting parties and relevant international standards.
- 4. Procedures for developing "Common definitions" shall be developed.

The members of the second Common Tasks Group meeting initially expressed 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 decided that GRSG establish 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 and the members reached a consensus to commence specific discussions on common definitions for vehicle weight and dimensions at the next meeting. For vehicle categories, after debating on the basis of the summary data supplied by Japan, it was decided that the discussions on elements subject to definition be 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. This meeting was attended by Canada, Japan, the former Chairman of GRSG, OICA and IMMA. The Government of Canada stated that it would not be necessary to define vehicle categories if they were established as test conditions. On the other hand, OICA advocated clear defining vehicle categories to preclude the divergent interpretations of vehicle categories by nations. The small-group members supported the OICA opinion favoring the establishment of common definitions for vehicle categories.

The third Common Tasks Group meeting was held on 8-9 October 2001, where Japan and OICA respectively presented drafts on the common definitions of vehicle weight and dimensions. The minimum necessary elements were approved in accordance with the guidelines. Opinions on vehicle categories were expressed by many nations

The Czech Republic supported the 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 classified as small, medium, and large commercial vehicles according to their (GVW). Japan supported the 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). OICA made comments similar to Japan's, but, for commercial vehicles, supported the plan to categorize them as small, medium and large commercial vehicles according to their (GVW). Canada commented that vehicles should not be defined by categories but only according to their parameter characters, details being defined by individual gtrs.

The members discussed these comments and reached a consensus, for the time being, to define vehicles based on minimum necessary requirements, and it was decided to establish the categories of passenger car, bus, and commercial vehicle with the commercial vehicle category further divided into the subcategories of small, medium and large commercial vehicles. This consensus was an existing conceptualistic Resolution on Construction of Vehicles (R.E.3). The members also agreed that Japan, in cooperation with OICA, produce a combined draft on the common definitions of vehicle categories, weight, and dimensions by January 2002.

In order to start an advance discussion on Japan's draft prior to the fourth Common Tasks Group meeting, a preliminary meeting was conducted in Ottawa on 4 April 2002. This meeting was attended by Canada, Germany, Japan, US, OICA and IMMA. Prior to this meeting, copies of the draft produced by Japan were distributed to the members, and the comments were received from Canada, Hungary, Netherlands, and France. Reflecting those comments, Japan prepared material for discussions at the Ottawa preliminary meeting.

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

**Hungary** proposed 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.

**Netherlands** proposed to define "unladen mass" more clearly and clarify where to define Gross Vehicle Mass (GVM) and Gross Technical Mass (GTM). The draft was amended to that effect.

**France** made comments with regard to the definition of seating positions as well as the additional definition of GTM. The members finally reached a consensus to define seating positions according to the number of seat anchorages. The meeting adopted the French proposal for GTM.

**Japan** proposed 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 draft was adopted for lack of more appropriate ones. A formula to calculate the number of passengers was inserted.

Canada proposed 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, attending members approved the amended proposal presented by Japan, except 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 the members had differing opinions on whether to include the lamps, tyres, and other components attached to the vehicle body, it was decided to introduce 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, an agreement was reached on the draft, excepting five unresolved issues. It was agreed that a small group be formed to deal with the pending issues listed below, while the group decided that Category 1 represents passenger cars, Category 2 commercial vehicles, and Category 3 two-wheeled vehicles.

### Pending Issues

- 1) Sub-categorization of Category 2 by weight
- 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, a consensus was reached on the above issues 2), 4), and 5); however, issues 1) on sub-categorization by weight 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, European Union, and Japan. Although Japan and the European Union proposed the defining of seating positions by the number of safety belt anchorages, the United States of America pointed out the inability to determine the number of passengers on a bench seat by the proposed definition. An alternative of defining the number of seating positions based on the width of a bench seat was discussed. The tripartites nevertheless failed to form a consensus. It was decided that further discussion on the defining of seating positions be suspended until a gtr related to seats would be formulated. Since seating positions would be used as a condition for determining a vehicle category, it was decided that for the time being seating positions be counted only if the seats are supported by seat anchorages. 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. 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 even 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 decided that breakpoints be established on the basis of technical rationales in the future when specific gtrs will be formulated. To prevent the number of breakpoints from increasing excessively, the chairperson suggests the 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 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 decided 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 and approved by the members.

Summary: As a result, the Common Tasks Group reached a consensus in principle to the draft gtr on Vehicle Definitions. Although comments were forwarded from the European Union and the draft was accordingly modified, the wording of the draft basically remained to respect the consensus 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/WP29/2003/17 to the one-hundred-and-twenty-ninth session of WP29 as the proposal of draft gtr, followed by the U.S. proposal TRANS/2003/WP29/51. Taking into consideration the US proposal, Japan at the 8th WP29/AC3 proposed that the so-called gtr 0 should have the administrative status of the Resolution. WP29/AC3 agreed on the proposed principal and decided that GRSG should

prepare the technical work. The new title regarding Common Tasks is "Uniform provisions setting forth common definitions and procedures to be used in global technical regulation (gtr 0)", to be developed for 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.

Under these circumstances Japan proposes TRANS/WP29/2003/17/Rev1 to the one-hundred-and-thirty-first session of WP29. And TRANS/WP29/GRSG/2003/10 is revised based on this TRANS/WP29/2003/17/Rev1, hoping that WP29/AC3 approve this document as resolution.

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.** TEXT OF RESOLUTION

## UNIFORM PROVISIONS SETTING FORTH COMMON DEFINITIONS AND PROCEDURES TO BE USED IN GLOBAL TECHNICAL REGULATIONS (gtr 0)

## **CONTENTS**

page

- 1. SCOPE
- 2. GENERAL REQUIREMENTS
- 3. SPECIFIC REQUIREMENT
- 4. APPLICATION

## **ANNEXES**

Annex 1 - GENERAL DEFINITIONS

Annex 2 - CATEGORIZATION OF VEHICLES

Annex 3 - MASSES

Annex 4 - DIMENSIONS

## 1. <u>SCOPE</u>

- 1.1. This document contains the definitions of common terms, procedures and formats 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).
- 1.2. The definitions of common terms, procedures and formats in this document are not necessarily to be used in vehicle technical regulation of each Contracting Party.

## 2. GENERAL REQUIREMENTS

- 2.1. When applying the provisions of any gtr, Contracting Parties to the 1998 Agreement shall apply that gtr in accordance with the provisions of this resolution.
- 2.2. Contracting Parties may continue to apply their national or **regional** definitions and procedures for subcategories of vehicles, within the categories specified in this resolution and as exceptions to the application of gtrs.
- 2.3. In drafting new or amended gtrs, Contracting Parties to the 1998 Agreement shall directly use the same definition prescribed in this gtr 0 by using the same language in each gtr.
- 2.4. Where, in drafting new or amended gtrs, the need becomes apparent to create new definitions or procedures which are likely to be used in more than one gtr, consideration shall be given to placing them in this **gtr 0**.
- 2.4.1 Amending gtr 0 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 gtr 0, 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 SI unit conforming to ISO Standard 1000:**1992**.

## 3. <u>SPECIFIC REQUIREMENTS</u>

- 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.

## 4. APPLICATION

Where, as a result of the definitions in this  $gtr \ \theta$ , a vehicle manufacturer produces a model range which includes vehicles some of which fall in one category and some in another, or in different sub-categories thereof, the manufacturer may select, separately in respect of each gtr, either to apply the appropriate category requirement to each model within the range or to apply the more stringent requirement to all the vehicles in the model range.

#### 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. "<u>Vehicle</u>" 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 the addition of readily attachable components, such as mirrors or tire and rim assemblies, or minor finishing operations such as painting.]

### 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+Nx68) > Nx68,

 $N \le 6$  and

Pay mass as defined in paragraph 6. of annex 3 exceeds [150/200] kg, 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 the entry into force of a gtr on seats, 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 cm<sup>3</sup> 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 cm<sup>3</sup> 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 cm<sup>3</sup> 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 cm<sup>3</sup> or whatever the means of propulsion a maximum design speed exceeding [50] km/h.
- 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 cm<sup>3</sup> or whatever the means of propulsion a maximum design speed exceeding [50] km/h.

 $<sup>\</sup>underline{1}$ / The EU has entered a study reservation on the maximum speed of category 3-1 vehicles.

3. TRAILERS (INCLUDING SEMI-TRAILERS). To be developed.

#### **MASSES**

For the purpose of global technical regulations:

- 1. All masses shall be expressed in kilograms (kg).
- 2. "<u>Unladen Vehicle Mass</u>" 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 accessories*, electrical and auxiliary equipment for normal operation of vehicle, including liquids, tools, fire extinguisher, standard spare parts, chocks and spare wheel, if fitted.]1/
- 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.
- [2.3. If the vehicle is intended to be capable of towing, the mass in running order shall include the mass of the coupling device or, if one is not fitted by the manufacturer, a notional mass representing a typical towing device suitable for the vehicle and loads concerned.]
- 3. "Mass in running order" means the nominal mass of a vehicle as determined by the following criteria:
- 3.1. In respect of a complete vehicle:

Sum of unladen vehicle mass, driver's mass *and mass of any additional accessories that come on top of that weight.* The driver 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' 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*.

 $<sup>\</sup>underline{1}/A$  further proposal on masses, including the status of the coupling device is to be developed.

- 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 7kg 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 capacity" means the permissible mass corresponding to the maximum mass to be carried by the axle as defined by the vehicle manufacturer, not exceeding the axle manufacturer's specifications. The maximum axle 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.

\_\_\_\_\_

#### **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 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.

\* \* \*