

GRSP non-harmonized definitions

During the Administrative Committee for the Coordination of Work (AC.2), March 2014 session, it was considered the "UN Vehicle Regulations Dictionary", prepared by a former intern of Vehicle Regulations and Transport Innovations Section. AC.2 welcomed the work done and considered to possible publication on our website. As the definitions listed in the dictionary show a number of inconsistencies between some of the definitions used in a number of UN Regulations, AC.2 did not yet endorse its publication on WP.29 website and preferred to take a decision in June. Accordingly, GRSP may wish to start examinations of these inconsistencies reproduced below to find possible solutions and provide a first answer to WP.29 June 2014 session.

Contents

A-PILLAR (GRSP, GRSG)	3
ACTUAL TORSO ANGLE (GRSP, GRSG).....	3
ADJUSTING DEVICE (GRSP)	3
ADJUSTMENT SYSTEM (GRSP).....	3
AIRBAG (GRSP).....	4
ANCHORAGE (GRSP).....	4
APPROVAL OF A VEHICLE (GRB, GRE, GRPE, GRRF, GRSG, GRSP).....	4
ATTACHMENTS (GRSP)	5
BELT (GRSP, GRRF).....	5
BUCKLE (GRSP)	6
BUMPER (GRSG, GRSP).....	6
CARRY-COT RESTRAINT (GRSP).....	6
CHAIR SUPPORT (GRSP).....	6
CHILD-SAFETY CHAIR (GRSP).....	6
CHILD SUPPORT (GRSP)	6
COUPLING SYSTEM FOR CHARGING THE RECHARGEABLE ENERGY STORAGE SYSTEM "RESS" (GRE, GRSP)	6
CROTCH STRAP (GRSP)	6
DIRECT CONTACT (GRSP).....	7
DISPLACEMENT SYSTEM (GRSP).....	7
ELECTRIC POWER TRAIN (GRPE, GRSP).....	7
EMERGENCY LOCKING RETRACTOR TYPE 4 (GRSP).....	7
ENCLOSURE (GRSP)	7
ENERGY ABSORBER (GRSP).....	7
EXPOSED CONDUCTIVE PART (GRSP).....	8
FLOOR (GRSP, GRSG)	8

HARNES BELT (GRSP).....	8
HAZARD WARNING SIGNAL (GRE, GRSP)	8
“H” POINT (GRSP, GRSG).....	8
HEAD INJURY CRITERIA “HIC” (GRSG, GRSP)	8
HIGH VOLTAGE (GRSP).....	9
IMPACTOR (GRSP)	9
INTEGRATED HEAD RESTRAINT (GRSP).....	9
ISOFIX (GRSP).....	9
ISOFIX ANCHORAGES SYSTEM (GRSP)	9
ISOFIX ATTACHMENT (GRSP).....	9
ISOFIX CHILD RESTRAINT SYSTEM (GRSP)	11
ISOFIX POSITION (GRSP).....	11
ISOFIX TOP TETHER ANCHORAGE (GRSP)	11
LOCKING SYSTEM (GRSP)	11
MASS IN RUNNING ORDER (GRE, GRSP).....	12
MASS OF A VEHICLE IN RUNNING ORDER “MRO” (GRSP, GRB, GRSG).....	12
OPEN TYPE TRACTION BATTERY (GRSP).....	12
PARTITIONING SYSTEM (GRSP).....	12
PASSENGER COMPARTMENT (GRSP, GRSG).....	12
REFERENCE HEIGHT (GRSP)	13
REFERENCE LINE (GRSP).....	13
REFERENCE MASS (GRPE, GRSP).....	14
REFERENCE PLANE (GRSP, GRSG).....	14
REFERENCE ZONE (GRSP).....	15
RETRACTOR (GRSP)	15
SEAT (GRSP, GRSG)	15
SEATING REFERENCE POINT, “R” POINT (GRSP, GRSG).....	15
SEAT TYPE (GRSP).....	16
SIDE-FACING SEAT (GRSP).....	16
SOLID INSULATOR (GRSP).....	16
SPECIAL NEEDS RESTRAINT (GRSP).....	16
STEERING CONTROL (GRSP, GRRF)	17
STRAP (GRSP).....	17
SUPPORT LEG (GRSP).....	17
TRANSVERSE PLANE (GRSP, GRSG, GRE).....	17
TROLLEY (GRSP).....	17

UNLADEN MASS “MV” (GRSG, GRPE, GRRF, GRSP).....	17
UNLADEN KERB MASS “Mk” (GRSG, GRSP)	18
UNLADEN VEHICLE MASS (GRRF, GRSP)	18
VEHICLE TYPE (GRB, GRE, GRPE, GRRF, GRSG, GRSP).....	18
WINDSCREEN (GRSP, GRSG)	24

A-PILLAR (GRSP, GRSG)

(UN, Reg.29) means the foremost and outermost roof support.

(UN, Reg.125) means any roof support forward of the vertical transverse plane located 68 mm in front of the V points and includes non-transparent items such as windscreen mouldings and door frames, attached or contiguous to such a support.

(UN, Reg.127) means the foremost and outermost roof support extending from the chassis to the roof of the vehicle.

ACTUAL TORSO ANGLE (GRSP, GRSG)

(UN, Reg.14 and 43) means the angle measured between a vertical line through the “H” point and the torso line using the back angle quadrant on the 3-D H machine. The actual torso angle corresponds theoretically to the design torso angle.

The relative positions of the “R” point and the “H” point and the relationship between the design torso angle and the actual torso angle shall be considered satisfactory for the seating position in question if the “H” point, as defined by its co-ordinates, lies within a square of 50 mm side length with horizontal and vertical sides whose diagonals intersect at the “R” point, and if the actual torso angle is within 5° of the design torso angle.

(UN, Reg.17, 94 and 95) means the angle measured between a vertical line through the “H” point and the torso line using the back angle quadrant on the 3-D H machine. The actual torso angle corresponds theoretically to the design torso angle.

ADJUSTING DEVICE (GRSP)

(UN, Reg.44) means a device enabling the restraint or its attachments to be adjusted to the physique of the wearer, the configuration of the vehicle, or both. The adjusting device may either be part of the buckle or be a retractor or any other part of the safety belt.

(UN, Reg.129) means a device enabling the belt or its attachments to be adjusted to the physique of the wearer. The adjusting device may either be part of the buckle or be a retractor or any other part of the belt.

ADJUSTMENT SYSTEM (GRSP)

(UN, Reg.14, 17 and 25) means the device by which the seat or its parts can be adjusted to a position suited to the morphology of the seated occupant. This device may, in particular, permit of:

- Longitudinal displacement;
- Vertical displacement;
- Angular displacement;

(UN, Reg.44) means the complete device by which the vehicle seat or its parts can be adjusted to suit the physique of the seat’s adult occupant; this device may, in particular, permit:

- Longitudinal displacement, and/or
- Vertical displacement, and/or
- Angular displacement.

(UN, Reg.80) means the device by which the seat or its parts can be adjusted to a position suited to the seated occupant.

(UN, Reg.126) means the device by which the partitioning system or its parts can be adjusted to a position suited to the installation as recommended by the applicant for the approval in the prescribed vehicle(s) and position(s) within said vehicle(s).

(UN, Reg.129) means the complete device by which the vehicle seat or its parts can be adjusted to suit the physique of the seat’s adult occupant; this device may, in particular, permit longitudinal displacement, and/or vertical displacement, and/or angular displacement.

AIRBAG (GRSP)

(UN, Reg.21 and 94) means a device installed to supplement safety belts and restraint systems in power driven vehicles, i.e. systems which, in the event of a severe impact affecting the vehicle, automatically deploy a flexible structure intended to limit, by compression of the gas contained within it, the gravity of the contacts of one or more parts of the body of an occupant of the vehicle with the interior of the passenger compartment.

(UN, Reg.114) means a flexible material, forming an enclosed volume that receives the gas from the inflator and restrains the occupant.

ANCHORAGE (GRSP)

(UN, Reg.17) means the system by which the seat assembly is secured to the vehicle structure, including the affected parts of the vehicle structure.

(UN, Reg.80) means a part of the floor or of the body of a vehicle to which a seat may be fixed.

(UN, Reg.126) means the system by which the partitioning system is secured to the vehicle structure, including the affected parts of the vehicle structure.

APPROVAL OF A VEHICLE (GRB, GRE, GRPE, GRRF, GRSG, GRSP)

(UN, Reg.9) means the type with regard to the noise level and the original exhaust system as a technical unit.

(UN, Reg.11) means the approval of a vehicle type with regard to door latches and door retention components.

(UN, Reg.12) means the approval of a vehicle type with regard to the protection of the driver against the steering mechanism in the event of impact.

(UN, Reg.13 and 13H) means the approval of a vehicle type with regard to braking.

(UN, Reg.14) means the approval of a vehicle type equipped with anchorages for given types of safety-belts.

(UN, Reg.17) means the approval of a vehicle type with regard to the strength of the seats and their anchorages, the design of the rear parts of the seat backs and the characteristics of their head restraints.

(UN, Reg.18) means the approval of a vehicle type with regard to its protection against unauthorized use.

(UN, Reg.21) means the approval of a vehicle type with regard to its interior fittings.

(UN, Reg.24) means the approval of a vehicle type with regard to the installation of type approved engines for the limitation of visible pollutants from the engine. Also means the approval of a vehicle type with regard to limitation of the emission of visible pollutants from the engine.

(UN, Reg.26) means the approval of a vehicle type with regard to its external projections.

(UN, Reg.29) means the approval of a vehicle type with regard to the protection of the occupants of the cab of a vehicle in the event of head-on impact or of overturning.

(UN, Reg.32) means the approval of a vehicle type with regard to the behaviour of the structure of the passenger compartment in a rear-end collision.

(UN, Reg.33) means the approval of a vehicle type with regard to the behaviour of the structure of the passenger compartment in a head-on collision.

(UN, Reg.34) means the approval of a vehicle type with regard to the foot controls.

(UN, Reg.35) means the approval of a vehicle type with regard to the liquid fuel tanks.

(UN, Reg.36) means the approval of a vehicle type with regard to the constructional features.

(UN, Reg.39) means the approval of a vehicle type with regard to the speedometer equipment including its installation.

(UN, Reg.40) means the approval of a vehicle type with regard to the limitation of the emission of gaseous pollutants from the engine.

(UN, Reg.42) means the approval of a vehicle type with regard to the behaviour of certain parts of its front and rear structure in the event of a collision at low speed.

(UN, Reg.45) means approval of a vehicle type with regard to headlamp cleaners.

(UN, Reg.47) means the approval of a vehicle type with regard to the limitation of the emission of gaseous pollutants from the engine.

(UN, Reg.48) means the approval of a vehicle type with regard to the number and mode of installation of the lighting and light-signalling devices.

(UN, Reg.49) means the approval of vehicle type with regard to the level of the emission of gaseous and particulate pollutants and smoke by its engine as well as the on-board diagnostic "OBD" system and the engine installation on the vehicle.

(UN, Reg.50, 53, 74 and 113) means the approval of a vehicle type with regard to the number and mode of installation of the lighting and light-signalling devices.

(UN, Reg.51) means the approval of a vehicle type with regard to noise.

(UN, Reg.52) means the approval of a vehicle type with regard to the constructional features.

(UN, Reg.58) means the approval of a vehicle type with regard to the installation of an RUPD of an approved type.

(UN, Reg.60) means the approval of a vehicle type with regard to driver-operated controls, where such controls are fitted and to their identification.

(UN, Reg.61) means the approval of a vehicle type with regard to its protection against unauthorized use.

(UN, Reg.64) means the approval of a vehicle type with regard to its temporary use spare wheel and tyre unit.

(UN, Reg.67) means the approval of a vehicle type with regard to the installation of its specific equipment for the use of liquefied petroleum gases in its propulsion system.

(UN, Reg.68) means the approval of a vehicle type as regards measurement of the maximum speed indicated by the manufacturer.

(UN, Reg.73) means the approval of a complete, incomplete or completed vehicle type with regard to its lateral protection.

(UN, Reg.78) means the approval of a vehicle type with regard to braking.

(UN, Reg.79) means the approval of a vehicle type with regard to its steering equipment.

(UN, Reg.80) means an approval of a vehicle type with regard to the strength of the parts of the vehicle structure to which seats are to be secured, and with regard to the installation of seats.

(UN, Reg.83) means the approval of a vehicle type with regard to the limitation of the following conditions:
Limitation of exhaust emissions by the vehicle, evaporative emissions, crankcase emissions, durability of pollution control devices, cold start pollutant emissions and on-board diagnostics of vehicles fuelled with unleaded petrol, or which can be fuelled with either unleaded petrol and LPG or NG/biomethane or biofuels (Approval B).
Limitation of emissions of gaseous and particulate pollutants, durability of pollution control devices and on-board diagnostics of vehicles fuelled with diesel fuel (Approval C) or which can be fuelled with either diesel fuel and biofuel or biofuel.
Limitation of emissions of gaseous pollutants by the engine, crankcase emissions, durability of pollution control devices, cold start emissions and on-board diagnostics of vehicles fuelled with LPG or NG/biomethane (Approval D).

(UN, Reg.84) means the approval of a vehicle type with regard to the measurement of the fuel consumption.

(UN, Reg.89) means the approval of a vehicle type with regard to speed limitation and the installation of the device.

(UN, Reg.93) means the approval of a vehicle type with regard to its FUPD and the installation of an FUPD.

(UN, Reg.95) means the approval of a vehicle type with regard to the behaviour of the structure of the passenger compartment in a lateral collision.

(UN, Reg.101) means the approval of a vehicle type with regard to the measurement of energy consumption (fuel or electric energy).

(UN, Reg.102) means the approval of a vehicle with regard to the fitting of an approved close-coupling device.

(UN, Reg.111) means approval of a vehicle type with regard to rollover stability.

(UN, Reg.121) means the approval of a vehicle type with regard to the mode of installation, graphical design, legibility, colour, and brightness of controls, tell-tales, and indicators.

(UN, Reg.127) means the full procedure whereby a Contracting Party to the Agreement certifies that a vehicle type meets the technical requirements of pedestrian safety.

ATTACHMENTS (GRSP)

(UN, Reg.16) Parts of the belt assembly including the necessary securing components, which enable it to be attached to the belt anchorages.

(UN, Reg.44) means parts of the child restraint, including securing components, which enable the child restraint to be firmly secured to the vehicle structure either directly or through the vehicle seat.

BELT (GRSP, GRRF)

(UN, Reg.44) means a child restraint comprising a combination of straps with a securing buckle, adjusting devices and attachments.

(UN, Reg.16) An arrangement of straps with a securing buckle, adjusting devices and attachments which is capable of being anchored to the interior of a power-driven vehicle and is designed to diminish the risk of injury to its wearer, in the event of collision or of abrupt deceleration of the vehicle, by limiting the mobility of the wearer's body. Such an arrangement is generally referred to as a "belt assembly", which term also embraces any device for absorbing energy or for retracting the belt.

The arrangement can be tested and approved as a safety-belt arrangement or as a restraint system.

(UN, Reg.108 and 109) applies to a radial ply or bias belted tyre and means a layer or layers of material or materials underneath the tread, laid substantially in the direction of the centre line of the tread to restrict the carcass in a circumferential direction.

(UN, Reg.129) means a child restraint comprising a combination of straps with a securing buckle, adjusting devices and attachments.

BUCKLE (GRSP)

(UN, Reg.16) is a quick-release device enabling the wearer to be held by the belt. The buckle may incorporate the adjusting device, except in the case of a harness belt buckle.

(UN, Reg.44) means a quick release device which enables the child to be held by the restraint or the restraint by the structure of the car and can be quickly opened. The buckle may incorporate the adjusting device.

BUMPER (GRSG, GRSP)

(UN, Reg.26 and 61) means the front or rear, lower, outer structure of a vehicle. It includes all structures that are intended to give protection to a vehicle when involved in a low speed frontal or rear collision and also any attachments to this structure.

(UN, Reg.127) means the front, lower, outer structure of a vehicle. It includes all structures that are intended to give protection to a vehicle when involved in a low speed frontal collision and also any attachments to this structure. The reference height and lateral limits of the bumper are identified by the corners and the bumper reference lines.

CARRY-COT RESTRAINT (GRSP)

(UN, Reg.44) means a device used to restrain a carry-cot to the structure of the vehicle.

(UN, Reg.129) means a device used to restrain a carry-cot to the structure of the vehicle.

CHAIR SUPPORT (GRSP)

(UN, Reg.44) means that part of a child restraint by which the chair can be raised.

(UN, Reg.129) means that part of a Child Restraint System by which the chair can be raised.

CHILD-SAFETY CHAIR (GRSP)

(UN, Reg.44) means a child restraint incorporating a chair in which the child is held.

(UN, Reg.129) means a Child Restraint System incorporating a chair in which the child is held.

CHILD SUPPORT (GRSP)

(UN, Reg.44) means that part of a child restraint by which the child can be raised within the child restraint.

(UN, Reg.129) means that part of a Child Restraint System by which the child can be raised within the Child Restraint System.

COUPLING SYSTEM FOR CHARGING THE RECHARGEABLE ENERGY STORAGE SYSTEM

“RESS” (GRE, GRSP)

(UN, Reg.10) means the electrical circuit installed in the vehicle used for charging the RESS.

(UN, Reg.12, 94, 95 and 100) means the electrical circuit used for charging the RESS from an external electrical power supply including the vehicle inlet.

CROTCH STRAP (GRSP)

(UN, Reg.44) means a strap or divided straps, where two or more pieces of webbing make it, attached to the child restraint and the lap strap and is so positioned as to pass between the child’s thighs; it is designed to prevent the child sliding under the lap belt in normal use and prevent the lap belt moving up off the pelvis in an impact.

(UN, Reg.129) means a strap, or divided straps, where two or more pieces of webbing make it, attached to the Child Restraint System and the lap strap and is so positioned as to pass between the child’s thighs; it is designed to prevent the child sliding under the lap belt in normal use and prevent the lap belt moving up off the pelvis in an impact.

DIRECT CONTACT (GRSP)

(UN, Reg.12, 94 and 95) means the contact of persons with high voltage live parts.

(UN, Reg.100) means the contact of persons with live parts.

DISPLACEMENT SYSTEM (GRSP)

(UN, Reg.14) means a device enabling the seat or one of its parts to be displaced or rotated without a fixed intermediate position, to permit easy access to the space behind the seat concerned.

(UN, Reg.17 and 25) means a device by which the seat or one of its parts can be displaced and/or rotated, without a fixed intermediate position, to permit easy access of occupants to the space behind the seat concerned.

(UN, Reg.44 and 80) means a device enabling the adult seat or one of its parts to be displaced angularly or longitudinally, without a fixed intermediate position, to facilitate the entry and exit of passengers and the loading and unloading of objects.

(UN, Reg.129) means a device enabling the adult seat or one of its parts to be displaced angularly or longitudinally, without a fixed intermediate position, to facilitate the entry and exit of passengers and the loading and unloading of objects.

ELECTRIC POWER TRAIN (GRPE, GRSP)

(UN, Reg.100) means the electrical circuit which includes the traction motor(s), and may include the RESS, the electric energy conversion system, the electronic converters, the associated wiring harness and connectors, and the coupling system for charging the RESS.

(UN, Reg.101) means a system consisting of one or more electric energy storage devices (e.g. a battery, electromechanical flywheel or super capacitor), one or more electric power conditioning devices and one or more electric machines that convert stored electric energy to mechanical energy delivered at the wheels for propulsion of the vehicle.

EMERGENCY LOCKING RETRACTOR TYPE 4 (GRSP)

(UN, Reg.16) is a retractor which during normal driving conditions does not restrict the freedom of movement by the wearer of the safety-belt. Such a device has length adjusting components which automatically adjust the strap to the wearer and a locking mechanism actuated in an emergency by:

- Deceleration of the vehicle, single sensitivity.
- A combination of deceleration of the vehicle, movement of the webbing or any other automatic means, multiple sensitivity.

(UN, Reg.44) means a retractor which does not restrict the belt wearer's freedom of movement in normal driving conditions. Such a device has length-adjusting devices which automatically adjust the strap to the wearer's physique, and a locking mechanism actuated in an emergency by:

- Deceleration of the vehicle, extraction of the strap from the retractor, or any other automatic means, single sensitivity.
- A combination of any of these means, multiple sensitivity.

ENCLOSURE (GRSP)

(UN, Reg.12, 94 and 95) means the part enclosing the internal units and providing protection against any direct contact.

(UN, Reg.100) means the part enclosing the internal units and providing protection against direct contact from any direction of access.

ENERGY ABSORBER (GRSP)

(UN, Reg.16) it is a device designed to disperse energy independently of or jointly with the strap and forming part of a belt assembly.

(UN, Reg.44) means a device which is designed to dissipate energy independently of or jointly with the strap and forms part of a child restraint.

(UN, Reg.129) means a device which is designed to dissipate energy independently of or jointly with the strap and forms part of a Child Restraint System.

EXPOSED CONDUCTIVE PART (GRSP)

(UN, Reg.12 and 100) means the conductive part which can be touched under the provisions of the protection IPXXB and which becomes electrically energized under isolation failure conditions. This includes parts under a cover that can be removed without using tools.

(UN, Reg.94 and 95) means the conductive part which can be touched under the provisions of the protection IPXXB, and which becomes electrically energized under isolation failure conditions.

FLOOR (GRSP, GRSG)

(UN, Reg.14) means the lower part of the vehicle body-work connecting the vehicle side walls. In this context it includes ribs, swages and possibly other reinforcements, even if they are below the floor, such as longitudinal and transverse members.

(UN, Reg.107) means that part of the bodywork whose upper surface supports standing passengers, the feet of seated passengers and the driver and any crew member, and may support the seat mountings.

HARNESS BELT (GRSP)

(UN, Reg.16) it is an S-type belt arrangement comprising a lap belt and shoulder straps; a harness belt may be provided with an additional crotch strap assembly.

(UN, Reg.44 and 129) means a belt assembly comprising a lap belt, shoulder restraints and, where fitted, a crotch strap.

HAZARD WARNING SIGNAL (GRE, GRSP)

(UN, Reg.48, 50, 53, 65 and 113) means the simultaneous operation of all of a vehicle's direction-indicator lamps to show that the vehicle temporarily constitutes a special danger to other road-users.

(UN, Reg.86) means the device permitting the simultaneous operation of all of a tractor's direction indicator lamps to draw attention to the fact that the tractor temporarily constitutes a special danger to other road-users.

“H” POINT (GRSP, GRSG)

(UN, Reg.14 and 43) means the pivot centre of the torso and thigh of the 3-D H machine installed in the vehicle seat. The “H” point is located in the centre of the centreline of the device which is between the “H” point sight buttons on either side of the 3-D H machine. The “H” point corresponds theoretically to the “R” point. The relative positions of the “R” point and the “H” point and the relationship between the design torso angle and the actual torso angle shall be considered satisfactory for the seating position in question if the “H” point, as defined by its co-ordinates, lies within a square of 50 mm side length with horizontal and vertical sides whose diagonals intersect at the “R” point, and if the actual torso angle is within 5° of the design torso angle. Once determined, the “H” point is considered fixed in relation to the seat-cushion structure and to move with it when the seat is adjusted.

(UN, Reg.17) means the pivot centre of the torso and thigh of the 3 D H machine installed in the vehicle seat. The “H” point is located in the centre of the centreline of the device which is between the “H” point sight buttons on either side of the 3-D H machine. The “H” point corresponds theoretically to the “R” point. Once determined in accordance with the procedure, the “H” point is considered fixed in relation to the seat-cushion structure and to move with it when the seat is adjusted.

(UN, Reg.94 and 95) means the pivot centre of the torso and the thigh of the 3-D H machine installed in the vehicle seat. The “H” point is located in the centre of the centreline of the device which is between the “H” point sight buttons on either side of the 3-D H machine. The “H” point corresponds theoretically to the “R” point. Once determined, the “H” point is considered fixed in relation to the seat-cushion structure and to move with it when the seat is adjusted.

HEAD INJURY CRITERIA “HIC” (GRSG, GRSP)

(UN, Reg.43) means a value for the characteristics of skull-brain injury arising from the deceleration forces which result from a blunt perpendicular impact with the glazing.

(UN, Reg.127) means the calculated result of accelerometer time histories using the following formula:

$$HIC = \left[\frac{1}{t_2 - t_1} \int_{t_1}^{t_2} a \, dt \right]^{2.5} (t_2 - t_1)$$

Where:

a is the resultant acceleration measured in units of gravity “g”.

“ t_1 ” and “ t_2 ” are the two time instants (expressed in seconds) during the impact, defining an interval between the beginning and the end of the recording period for which the value of HIC is a maximum ($t_2 - t_1 \leq 15$ ms).

HIGH VOLTAGE (GRSP)

(UN, Reg.12, 94 and 95) means the classification of an electric component or circuit, if its working voltage is > 60 V and ≤ 1500 V direct current “DC” or > 30 V and $\leq 1,000$ V alternating current “AC” root – mean- square (rms).

(UN, Reg.100) means the classification of an electric component or circuit, if its working voltage is > 60 V and ≤ 1500 V direct current “DC” or > 30 V and ≤ 1000 V alternating current “AC” root mean square (rms).

IMPACTOR (GRSP)

(UN, Reg.12) consists of a rigid hemispherical headform 165 mm in diameter and 6.8 kg in weight.

(UN, Reg.95) means a crushable section mounted on the front of mobile deformable barrier.

INTEGRATED HEAD RESTRAINT (GRSP)

(UN, Reg.17) means a head restraint formed by the upper part of the seat back. These head restraints can only be detached from the seat or the vehicle structure by the use of tools or by partial or complete removal of the seat covering, meet the present definition.

(UN, Reg.25) means a head restraint constituted by the upper part of the seat back. Head restraints corresponding to removable head restraint and separate head restraint, but which cannot be detached from the seat or the vehicle structure except by the use of tools or following the partial or total removal of the seat furnishings.

ISOFIX (GRSP)

(UN, Reg.14, 16 and 44) is a system for the connection of child restraint systems to vehicles which has two vehicle rigid anchorages, two corresponding rigid attachments on the child restraint system, and a means to limit the pitch rotation of the child restraint system.

(UN, Reg.129) is a system that provides a method of connecting a Child Restraint System to a vehicle. It is based on two vehicle anchorages and two corresponding attachments on the Child Restraint System in conjunction with a means to limit the pitch rotation of the Child Restraint System. All three vehicle anchorages are to be approved according to Regulation No. 14.

ISOFIX ANCHORAGES SYSTEM (GRSP)

(UN, Reg.14 and 44) means a system made up of two ISOFIX low anchorages which is designed for attaching an ISOFIX child restraint system in conjunction with an anti-rotation device.

(UN, Reg.16) means a system made up of two ISOFIX low anchorages, child restraint system in conjunction with an anti-rotation device.

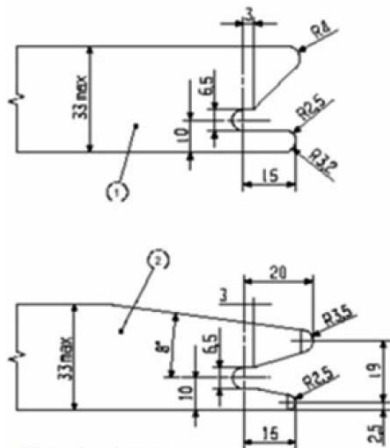
(UN, Reg.129) means a system made up of two ISOFIX low anchorages fulfilling the requirements of Regulation No. 14 which is designed for attaching an ISOFIX Child Restraint System in conjunction with an anti-rotation device.

ISOFIX ATTACHMENT (GRSP)

(UN, Reg.14) means one of the two connections, extending from the ISOFIX child restraint system structure, and compatible with an ISOFIX low anchorage.

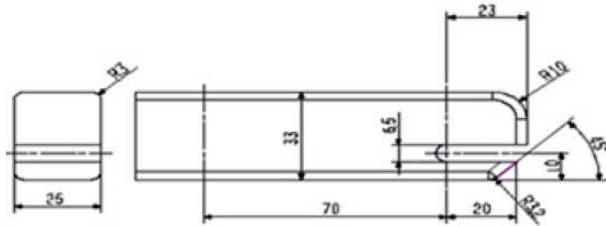
(UN, Reg. 44) means one of the two connections, extending from the ISOFIX child restraint system structure, and compatible with an ISOFIX low anchorage.

ISOFIX Attachments may be according to examples shown in Figure below, or other appropriate designs that are part of a rigid mechanism having provision for adjustment, the nature of which is determined by the ISOFIX child restraint system manufacturer.



Dimensions in mm

Dimensions for the portion of the ISOFIX child restraint system attachment that engages the ISOFIX anchorage system must not exceed the maximum dimensions given by the envelope in Figure below.

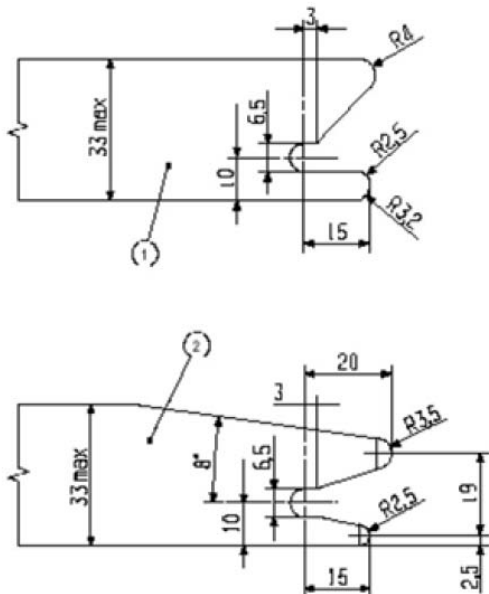


Dimensions in mm

Dimensions for the portion of the ISOFIX Child Restraint System attachment that engages the ISOFIX anchorage system shall not exceed the maximum dimensions given by the envelope in Figure below.

(UN, Reg.129) means one of the two connections, fulfilling the requirements below, extending from the ISOFIX Child Restraint System structure, and compatible with an ISOFIX low anchorage.

ISOFIX attachments may be according to examples shown in Figure 0(a), or other appropriate designs that are part of a rigid mechanism having provision for adjustment, the nature of which is determined by the ISOFIX Child Restraint System manufacturer.

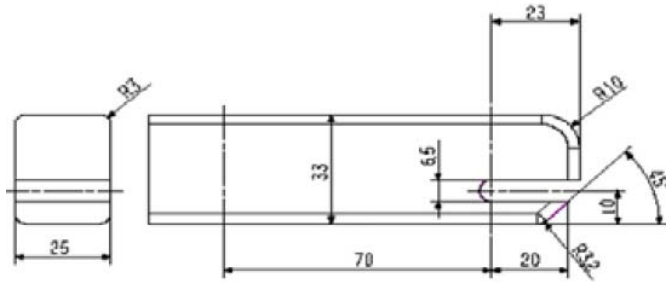


Dimensions in mm

Key

- 1 ISOFIX Child Restraint System attachment
- 2 ISOFIX Child Restraint System attachment

Dimensions for the portion of the ISOFIX Child Restraint System attachment that engages the ISOFIX anchorage system shall not exceed the maximum dimensions given by the envelope in Figure below.



Dimensions in mm

The ISOFIX Child Restraint System shall incorporate means by which there is a clear indication that both of the ISOFIX attachments are completely latched with the corresponding ISOFIX lower anchorages. The indication means may be audible, tactile or visual or a combination of two or more. In case of visual indication it shall be detectable under all normal lighting conditions.

ISOFIX CHILD RESTRAINT SYSTEM (GRSP)

(UN, Reg.14) means a child restraint system, which has to be attached to an ISOFIX anchorages system.

(UN, Reg.16) means a child restraint system, which has to be attached to an ISOFIX anchorages system.

(UN, Reg.44) means a child restraint system which has to be attached to an ISOFIX anchorage system.

ISOFIX POSITION (GRSP)

(UN, Reg.14, 16 and 44) means a system which allows an installation of:

- Either an universal ISOFIX forward facing child restraint system;
- Or a semi-universal ISOFIX forward facing child restraint system
- Or a semi-universal ISOFIX rearward facing child restraint system;
- Or a semi-universal ISOFIX lateral facing position child restraint system;
- Or a specific vehicle ISOFIX child restraint system

(UN, Reg.129) means a location which allows for the installation of either:

- Universal ISOFIX Child Restraint System.
- A specific vehicle ISOFIX Child Restraint System or a specific vehicle ISOFIX.
- An i-Size Child Restraint System suitable for use in specific ISOFIX seating positions as defined by the vehicle manufacturer.

ISOFIX TOP TETHER ANCHORAGE (GRSP)

(UN, Reg.14 and 16) means a feature, such as a bar, located in a defined zone, designed to accept an ISOFIX top tether strap connector and transfer its restraint force to the vehicle structure.

(UN, Reg.44 and 129) means a feature fulfilling the requirements of Regulation No. 14, such as a bar, located in a defined zone, designed to accept an ISOFIX top tether strap connector and transfer its restraint force to the vehicle structure.

LOCKING SYSTEM (GRSP)

(UN, Reg.14) means any device ensuring that the seat and its parts are maintained in any position of use and includes devices to lock both the seat back relative to the seat and the seat relative to the vehicle.

(UN, Reg.17) means a device ensuring that the seat and its parts are maintained in the position of use.

(UN, Reg.44, 80 and 129) means a device ensuring that the adult seat and its parts are maintained in the position of use.

(UN, Reg.126) means a device ensuring that the partitioning system and its parts are maintained in the position of use.

MASS IN RUNNING ORDER (GRE, GRSP)

(UN, Reg.78) means the sum of the unladen vehicle mass and driver mass.

(UN, Reg.127) means the nominal mass of a vehicle as determined by the sum of unladen vehicle mass and driver's mass.

MASS OF A VEHICLE IN RUNNING ORDER "MRO" (GRSP, GRB, GRSG)

(UN, Reg.12) means the mass of the vehicle unoccupied and unladen but complete with fuel, coolant, lubricant tools and spare wheel, if provided as standard equipment by the vehicle manufacturer, and RESS.

(UN, Reg.51) means the mass of an unloaded vehicle with bodywork, and with coupling device in the case of a towing vehicle, or the mass of the chassis with cab if the manufacturer does not fit the bodywork and/or coupling device, including coolant, oils, 90 per cent of fuel, 100 per cent of other liquids except used waters, tools, spare wheel, driver (75 kg) and, for buses and coaches, the mass of the crew member (75 kg) if there is a crew seat in the vehicle.

(UN, Reg.107 and RE3) means the mass of the unladen vehicle with bodywork, and with coupling device in the case of a towing vehicle, in running order, or the mass of the chassis with cab if the manufacturer does not fit the bodywork and/or coupling device including coolant, oils, 90 per cent fuel, 100 per cent other liquids except used waters, tools, spare wheel and driver (75 kg), and, for buses and coaches, the mass of the crew member (75 kg) if there is a crew seat in the vehicle.

(UN, Reg.133) means the mass of an unladen vehicle with bodywork, and with coupling device in the case of a towing vehicle, or the mass of the chassis with cab if the manufacturer does not fit the bodywork and/or coupling device, including coolant, oils, 90 per cent of fuel, 100 per cent of other liquids except used waters, tools, spare wheel, excluding the driver (75 kg).

OPEN TYPE TRACTION BATTERY (GRSP)

(UN, Reg.12, 94 and 95) means a type of battery requiring liquid and generating hydrogen gas released to the atmosphere.

(UN, Reg.100) means a liquid type battery requiring refilling with water and generating hydrogen gas released to the atmosphere.

PARTITIONING SYSTEM (GRSP)

(UN, Reg.17) means parts or devices which, in addition to the seat-backs, are intended to protect the occupants from displaced luggage; in particular, a partitioning system may be constituted by netting or wire mesh located above the level of the seat-backs in their upright or folded down position. Head restraints fitted as standard equipment for vehicles equipped with such parts or devices shall be considered as part of the partitioning system. However, a seat equipped with a head restraint shall not be considered as being on its own a partitioning system.

(UN, Reg.126) means parts or devices which in addition to the seat backs, are intended to protect occupants from displaced luggage.

PASSENGER COMPARTMENT (GRSP, GRSG)

(UN, Reg.32, 33, 34 and 95) means the space for occupant accommodation, bounded by the roof, floor, side walls, doors, outside glazing, front bulkhead and the plane of the rear compartment bulkhead or the plane of the rear seat back support.

(UN, Reg.36, 52, 66 and 107) means the space intended for passengers use excluding any space occupied by fixed appliances such as bars, kitchenettes or toilets or luggage compartment.

(UN, Reg.100) means the space for occupant accommodation, bounded by the roof, floor, side walls, doors, window glass, front bulkhead and rear bulkhead, or rear gate, as well as by the barriers and enclosures provided for protecting the power train from direct contact with live parts.

(UN, Reg.118) means the space for occupants' accommodation including bar, kitchen, toilet, etc.), bounded by:

- The roof.
- The floor.
- The side walls.
- The doors.
- The outside glazing.
- The rear compartment bulkhead or the plane of the rear seat.
- Back support.

- The driver's side of the longitudinal vertical median plane of the vehicle, the vertical transversal plane through the driver's R-point.
- The opposite side of the longitudinal vertical median plane of the vehicle, the front bulkhead.
(UN, Reg.122) means the interior part of the vehicle used to accommodate the driver and any passengers.

REFERENCE HEIGHT (GRSP)

(UN, Reg.42) means the height above the ground at which the vehicle should embody sufficient protective devices, both at "unladen kerb weight" and at "laden test weight". This reference height is that of the horizontal plane passing through the reference line of the impactor.

The impactor shall be of rigid construction, the impact contour being of hardened steel.

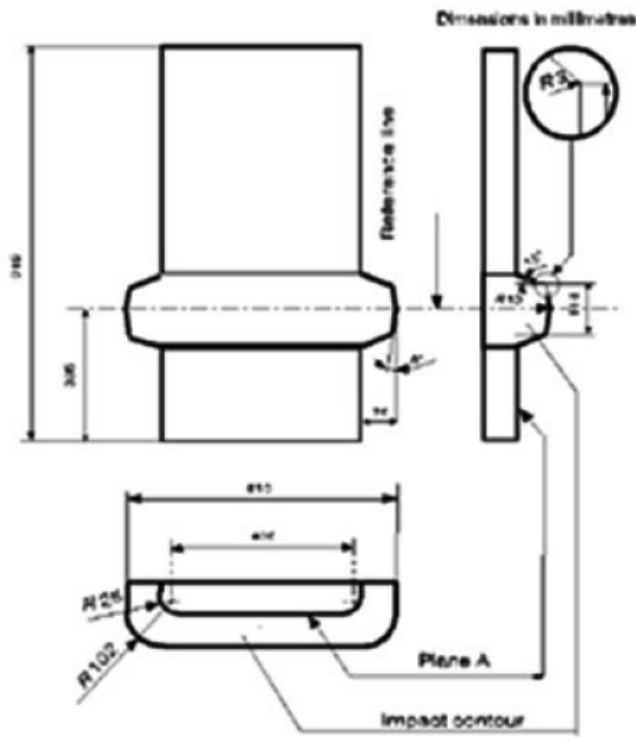
The impacting surface shall conform to the diagram in the figure below.

The effective mass shall be equal to the mass corresponding to the "unladen weight" of the vehicle to be tested.

With plane A of the impactor vertical, the reference line shall be horizontal.

The first contact of the impactor with the vehicle shall be by the impact contour on the protective device. In the two vehicle-loading conditions the protective device between the corners, shall be intersected by the horizontal plane passing through the reference line.

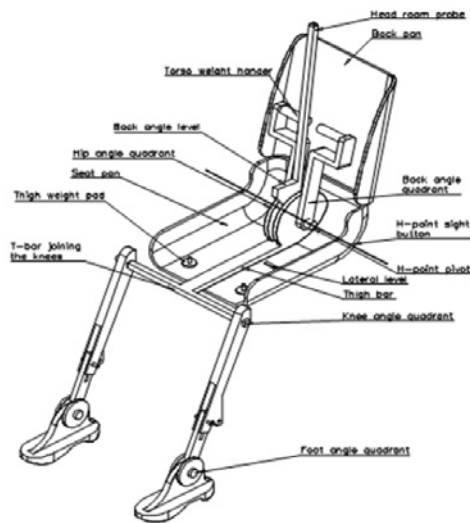
The reference height is 445 mm.



(UN, Reg.80) means the height of the top of the seat above the reference plane.

REFERENCE LINE (GRSP)

(UN, Reg17) means the line on the manikin reproduced below.



(UN, Reg.25) means a straight line which, either on a test manikin having the weight and dimensions of a fiftieth percentile adult male or on a test manikin having identical characteristics, passes through the joint of the leg with the pelvis and the joint of the neck with the thorax. On the manikin, for determining the H point of the seat, the reference line is that shown in the figure above.

Lower leg segments are connected to the seat pan assembly at the T-bar joining the knees, which is a lateral extension of the adjustable thigh bar. Quadrants are incorporated in the lower leg segments to measure knee angles. Shoe and foot assemblies are calibrated to measure the foot angle. Two spirit levels orient the device in space. Body element weights are placed at the corresponding centers of gravity to provide seat penetration equivalent to a 76/kg/male. All joints of the 3/DH machine should be checked for free movement without encountering noticeable friction.

(UN, Reg.42) means a line outside the impactor at the intersection of the horizontal plane of symmetry of the impact contour with the impact contour itself, plane A of the impactor being vertical.

REFERENCE MASS (GRPE, GRSP)

(UN, Reg.49) means the mass of the vehicle in running order less the uniform mass of the driver of 75 kg and increased by a uniform mass of 100 kg.

(UN, Reg.83, 84 and 101) means the “unladen mass” of the vehicle increased by a uniform figure of 100 kg.

(UN, Reg.95) means the “unladen mass” of the vehicle increased by a mass of 100 kg that is the mass of the side impact dummy and its instrumentation.

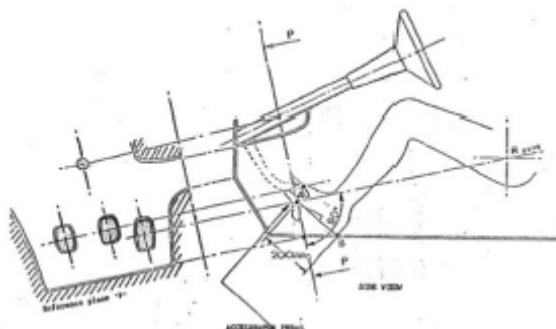
REFERENCE PLANE (GRSP, GRSG)

(UN, Reg.22) means a construction plane parallel to the basic plane of the headform at a distance from it which is a function of the size of the headform.

(UN, Reg.32 and 33) is a plane related to the vehicle and horizontal when the vehicle is unladen kerb weight.

(UN, Reg.35) “P” means a transverse plane perpendicular to the straight line connecting point “R” to point “A”.

- “A” is a point on the surface of the accelerator pedal 200 mm from point “B”.
- “B” is the fixed point on the vehicle corresponding to the heel point, as established by the vehicle manufacturer.



(*UN, Reg.61*) means a horizontal plane passing through the centre of the front wheels or a horizontal plane situated at the height of 50 cm above the ground, whichever is lower.

(*UN, Reg.80*) means the plane passing through the points of contact of the heels of the manikin, used for the determination of the H point and the actual angle of torso for the seating position of motor vehicles.

REFERENCE ZONE (GRSP)

(*UN, Reg.14 and 16*) means the space between two vertical longitudinal planes, 400 mm apart and symmetrical with respect to the H-point, and defined by rotation from vertical to horizontal of the head-form apparatus.

(*UN, Reg.21*) means the head-impact zone. The head-impact zone comprises all the non-glazed surfaces of the interior of a vehicle which are capable of entering into static contact with a spherical head 165 mm in diameter that is an integral part of a measuring apparatus whose dimension from the pivotal point of the hip to the top of the head is continuously adjustable between 736 mm and 840 mm, except:

- The area bounded by the forward horizontal projection of a circle circumscribing the outer limits of the steering control, increased by a peripheral band 127 mm in width; this area is bounded below by the horizontal plane tangential to the lower edge of the steering control when the latter is in the position for driving straight ahead.
- The part of the surface of instrument panel comprised between the edge of the area specified in the previous paragraph, and the nearest inner side-wall of the vehicle; this part of the surface is bounded below by the horizontal plane tangential to the lower edge of the steering control; and the widescreen side pillars.

(*UN, Reg.80*) means the space between two vertical longitudinal planes, 400 mm apart and symmetrical with respect to the H-point, and defined by rotation from vertical to horizontal of the headform apparatus.

leg and the torso of a human body represented by a manikin.

RETRACTOR (GRSP)

(*UN, Reg.16*) is a device to accommodate part or the whole of the strap of a safety-belt.

(*UN, Reg.44*) means a device designed to accommodate a part or the whole of the strap of a child restraint.

(*UN, Reg.129*) means a device designed to accommodate a part or the whole of the strap of a Child Restraint System.

The term covers the following devices:

- Automatically-locking retractor, a retractor which allows extraction of the desired length of a strap and, when the buckle is fastened, automatically adjusts the strap to the wearer's physique, further extraction of the strap without voluntary intervention by the wearer being prevented.
- Emergency-locking retractor, a retractor which does not restrict the strap wearer's freedom of movement in normal driving conditions. Such a device has length-adjusting devices which automatically adjust the strap to the wearer's physique, and a locking mechanism actuated in an emergency by:
 - i. Deceleration of the vehicle, extraction of the strap from the retractor, or any other automatic means (single sensitivity).
 - ii. A combination of any of these means (multiple sensitivity).

SEAT (GRSP, GRSG)

(*UN, Reg.14, 16, 17, 118 and 126*) means a structure which may or may not be integral with the vehicle structure, complete with trim, intended to seat one adult person. The term covers both an individual seat and part of a bench seat intended to seat one adult person.

(*UN, Reg.80*) means a structure likely to be anchored to the vehicle structure, including its trim and attachment fittings, intended to be used in a vehicle, and to seat one or more adult persons.

SEATING REFERENCE POINT, "R" POINT (GRSP, GRSG)

(*UN, Reg.14, 17, 29, 43 and 94*) means a design point defined by a vehicle manufacturer for each seating position and established with respect to the three-dimensional reference system.

(*UN, Reg.95*) means the reference point specified by the vehicle manufacturer which:

- Has co-ordinates determined in relation to the vehicle structure.
- Corresponds to the theoretical position of the point of torso/thighs rotation "H point" for the lowest and most rearward normal driving position or position of use given by the vehicle manufacturer for each seating position specified by him.

SEAT TYPE (GRSP)

(UN, Reg.14) means a category of seats which do not differ in such essential respects as:

- The shape, dimensions and materials of the seat structure.
- The types and dimensions of the adjustment systems and all locking systems.
- The type and dimensions of the belt anchorages on the seat, of the seat anchorage and of the affected parts of the vehicle structure.

(UN, Reg.16) category of seats which do not differ in such essential respects as:

- The shape, dimensions and materials of the seat structure.
- The types and dimensions of the seat lock adjustment and locking systems.
- The type and dimensions of the belt anchorage on the seat, of the seat anchorage and of the affected parts of the vehicle structure.

(UN, Reg.44) means a category of adult seats which do not differ in such essential respects as:

- The shape, dimensions and materials of the seat structure,
- The types and dimensions of the seat-lock adjustment and locking systems
- The type and dimensions of the adult safety-belt anchorage on the seat, of the seat anchorage, and of the affected parts of the vehicle structure.

(UN, Reg.80) means seats which do not differ essentially with respect to the following characteristics likely to affect their strength and their aggressiveness:

- Structure, shape, dimensions and materials of the load bearing parts.
- Types and dimensions of the seat back adjustment and locking system.
- Dimensions, structure and materials of the attachments and supports.

(UN, Reg.129) means a category of adult seats which do not differ in such essential respects as the shape, dimensions and materials of the seat structure, the types and dimensions of the seat-lock adjustment and locking systems, and the type and dimensions of the adult safety-belt anchorage on the seat, of the seat anchorage, and of the affected parts of the vehicle structure.

SIDE-FACING SEAT (GRSP)

(UN, Reg.16 and 17) means a seat which can be used while the vehicle is in motion and which faces towards the side of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of $90^{\circ} \pm 10^{\circ}$ with the vertical plane of symmetry of the vehicle.

(UN, Reg.80) means a seat which can be used whilst the vehicle is in motion and which faces towards the side of the vehicle in such a manner that the vertical plane of symmetry of the seat forms an angle of $90^{\circ} (\pm 10^{\circ})$ with the vertical plane of symmetry of the vehicle.

SOLID INSULATOR (GRSP)

(UN, Reg.12, 94 and 95) means the insulating coating of wiring harnesses provided in order to cover and prevent the high voltage live parts from any direct contact. This includes covers for insulating the high voltage live parts of connectors; and varnish or paint for the purpose of insulation.

(UN, Reg.100) means the insulating coating of wiring harnesses provided in order to cover and protect the live parts against direct contact from any direction of access; covers for insulating the live parts of connectors, and varnish or paint for the purpose of insulation.

SPECIAL NEEDS RESTRAINT (GRSP)

(UN, Reg.44) is a child restraint system designed for children who have special needs as a result of either a physical or mental handicap. This device may in particular permit additional restraining devices for any part of the child, but it must contain as a minimum a primary means of restraint which complies with the child restraint systems which are suitable for installation in power-driven vehicles having three or more wheels, and which are not intended for use with folding (tip-up) or with side-facing seats.

(UN, Reg.129) is a Child Restraint System designed for children who have special needs as a result of either a physical or mental disability; this device may in particular permit additional restraining devices for any part of the child, but it shall contain as a minimum a primary means of restraint which complies with the requirements.

STEERING CONTROL (GRSP, GRRF)

(UN, Reg.12) means the steering device, usually the steering wheel, which is actuated by the driver.

(UN, Reg.79) means the part of the steering equipment which controls its operation; it may be operated with or without direct intervention of the driver. For steering equipment in which the steering forces are provided solely or partly by the muscular effort of the driver the steering control includes all parts up to the point where the steering effort is transformed by mechanical, hydraulic or electrical means.

STRAP (GRSP)

(UN, Reg.16) it is A flexible component designed to hold the body and to transmit stresses to the belt anchorages.

(UN, Reg.44 and 129) means a flexible component designed to transmit forces.

SUPPORT LEG (GRSP)

(UN, Reg.44) means a permanent attachment to a child restraint creating a compressive load path between the child restraint and a vehicle structure in order to by-pass seat cushion effects during deceleration; a support leg may be adjustable.

(UN, Reg.129) means an anti-rotation device permanently attached to a Child Restraint System creating a load path between the Child Restraint System and the vehicle structure. A support-leg shall be adjustable in length (Z direction) and may be additionally adjustable in other directions.

TRANSVERSE PLANE (GRSP, GRSG, GRE)

(UN, Reg.17, 29, 32, 33, 34, 35, 48, 50, 53, 65, 74, 77, 87, 91, 95, 98, 104, 112, 113 and 123) means a vertical plane perpendicular to the median longitudinal plane of the vehicle.

(UN, Reg.86) means a vertical plane perpendicular to the median longitudinal plane of the tractor.

TROLLEY (GRSP)

(UN, Reg.80) means the test equipment made and used for dynamic reproduction of road accidents involving frontal collision.

(UN, Reg.95) means a wheeled frame free to travel along its longitudinal axis at the point of impact. Its front supports the impactor.

UNLADEN MASS "MV" (GRSG, GRPE, GRRF, GRSP)

(UN, Reg.34 and 73) means the mass of the vehicle in running order, unoccupied and unladen but complete with fuel, coolant, lubricants, tools and a spare wheel, if it is provided as standard equipment by the vehicle manufacturer.

(UN, Reg.36 and 52) means the unladen kerb mass (MK) (kg) of the vehicle, with the addition of 75 kg for the mass of the crew member corresponding to the seat, if any, specially assigned to this crew member. The vehicle shall be complete with 90 per cent of the capacity of all additional liquid tanks. Where facilities such as a kitchen or toilet are fitted, the fresh water tanks shall be full and the waste tanks empty.

(UN, Reg.49 and 83) means the mass of the vehicle in running order without the uniform mass of the driver of 75 kg, passenger or load, but with the fuel tank 90 per cent full and the usual set of tools and spare wheel on board, where applicable.

(UN, Reg.58) means the mass of the vehicle in running order, unoccupied and unladen but complete with fuel, coolant, lubricant, tools and a spare wheel, if provided as standard equipment by the vehicle manufacturer.

(UN, Reg.68) means the mass of the vehicle in running order without occupants or load, but with the fuel tank full (if any), cooling liquid, service and traction batteries, oils, onboard charger, portable charger, tools and spare wheel, if provided in series by the manufacturer of the vehicle.

(UN, Reg.84 and 89) means the mass of the vehicle in running order without crew, passengers or load, but with the fuel tank full and the usual set of tools and spare wheel on board, where applicable.

(UN, Reg.95) means the mass of the vehicle in running order without driver, passengers or load, but with the fuel tank filled to 90 per cent of its capacity and the usual set of tools and spare wheel on board, where applicable.

(UN, Reg.101) means the mass of the vehicle in running order without crew, passengers or load, but with the fuel tank full (if any), cooling liquid, service and traction batteries, oils, onboard charger, portable charger, tools and spare wheel, whatever is appropriate for the vehicle considered and if provided by the manufacturer of the vehicle.

UNLADEN KERB MASS “M_k” (GRSG, GRSP)

(UN, Reg.36, 52 and 66) means the mass of the vehicle in running order, unoccupied and unladen but with the addition of 75 kg for the mass of the driver, the mass of fuel corresponding to 90 per cent of the capacity of the fuel tank specified by the manufacturer, and the masses of coolant, lubricant, tools and spare wheel, if any.

(UN, Reg.94 and 114) means the mass of the vehicle in running order, unoccupied and unladen but complete with fuel, coolant, lubricant, tools and a spare wheel, if these are provided as standard equipment by the vehicle manufacturer.

(UN, RE3) means the mass of the vehicle in running order, without occupant or load, but with fuel, coolant, lubricant, tool-kit and spare wheel, if normally provided by the manufacturer.

UNLADEN VEHICLE MASS (GRRF, GRSP)

(UN, Reg.78) means the nominal mass of the vehicle as indicated by the manufacturer(s) including all factory fitted equipment for normal operation of that vehicle (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.

(UN, Reg.127) means the nominal mass of a complete vehicle as determined by the following criteria:

- 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.
- 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

VEHICLE TYPE (GRB, GRE, GRPE, GRRF, GRSG, GRSP)

(UN, Reg.9) means a category of motor vehicles which do not differ in such essential respects as:

- The lines and constituent materials of the body, more particularly the engine compartment and its soundproofing.
- The length and width of the vehicle.
- The type of engine (positive ignition or compression ignition; reciprocating or rotary piston; number and capacity of cylinders; number and type of carburettors or injection systems, arrangement of valves; maximum net power and corresponding engine speed). For rotary piston engines, the cubic capacity should be taken to be double of the volume of the chamber.
- Number and ratios of gears.
- The number, type and arrangement of exhaust systems.

(UN, Reg.10) in relation to electromagnetic compatibility includes all vehicles, which do not differ essentially in such respects as:

- The overall size and shape of the engine compartment.
- The general arrangement of the electrical and/or electronic components and the general wiring arrangement.
- The primary material of which the body or shell of the vehicle is constructed (for example, a steel, aluminium or fibreglass body shell). The presence of panels of different material does not change the vehicle type provided the primary material of the body is unchanged. However, such variations must be notified.

(UN, Reg.11) means a category of motor vehicles which do not differ in such essential respects as:

Designation of the vehicle type by the manufacturer;

- The type of latch;
- The type of door retention component;
- The way in which the latches and door retention components are fitted to and retained by the structure of the vehicle;
- Type of sliding doors;

(UN, Reg.12) means a category of motor vehicles which do not differ in such essential respects as:

- Vehicle powered by an internal combustion engine.
 - i. The structure, dimensions, lines and constituent materials of that part of the vehicle forward of the steering control.
 - ii. The mass of vehicle in running order.
- Vehicle powered by an electric engine
 - iii. The structure, dimensions, lines and constituent materials of that part of the vehicle forward of the steering control.
 - iv. The locations of the Rechargeable Energy Storage Systems (RESS), in so far as they have a negative effect on the result of the impact test.
 - v. Mass of the vehicle in running order.

(UN, Reg.13) means a category of vehicles which do not differ in such essential respects as:

- In the case of power-driven vehicle.
 - i. The vehicle category.
 - ii. The maximum mass.
 - iii. The distribution of mass among the axles.
 - iv. The maximum design speed.
 - v. A different type of braking equipment, with more particular reference to the presence or otherwise of equipment for braking a trailer, or any presence of an electric regenerative braking system.
 - vi. The number and arrangement of the axles.

- vii. The engine type.
- viii. The number and ratios of gears.
- ix. The final drive ratios.
- x. The tyre dimensions.
- In the case of trailers.
- xi. The vehicle category.
- xii. The maximum mass.
- xiii. The distribution of mass among the axles.
- xiv. A different type of braking equipment.
- xv. The number and arrangement of the axles.
- xvi. The tyre dimensions.

(UN, Reg.13H) means a category of vehicles which do not differ in such essential respects as:

- The maximum mass.
- The distribution of mass among the axles.
- The maximum design speed.
- A different type of braking equipment, with more particular reference to the presence or otherwise of equipment for braking a trailer or any presence of electric braking system.
- The engine type.
- The number and ratios of gears.
- The final drive ratios.
- The tyre dimensions.

(UN, Reg.14) means a category of power-driven vehicles, which do not differ in such essential respects as the dimensions, lines and materials of components of the vehicle structure or seat structure to which the safety-belts anchorages and the ISOFIX anchorages systems and ISOFIX top tether anchorages if any are attached and, if the anchorages strength is tested according to the dynamic test, the characteristics of any component of the restraint system, especially the load limiter function, having an influence on the forces applying to the safety-belt anchorages.

(UN, Reg.17) means a category of motor vehicles which do not differ in such essential respects as: the structure, shape, dimensions, materials and the mass of the seats, although the seats may differ in covering and colour; differences not exceeding 5 per cent in the mass of the approved seat type shall not be considered significant; the type and dimensions of the adjustment, displacement and locking systems of the seat-back and seats and their parts; the type and dimensions of the seat anchorages; the dimensions, frame, materials and padding of head restraints, although they may differ in colour and covering; the type and dimensions of the attachments of the head restraint and the characteristics of the part of the vehicle to which the head restraint is attached, in the case of a separate head restraint.

(UN, Reg.18) means a category of motor vehicles of categories M₂, M₃, N₂ and N₃ which do not differ in such essential respects as:

- The manufacturer's indications of the vehicle type.
- The arrangement and design of the vehicle component or components on which the protective device acts.
- The type of protective device.

(UN, Reg.21) with regard to the interior fittings of the passenger compartment, means power-driven vehicles which do not differ in such essential respects as:

- The lines and constituent materials of the bodywork of the passenger compartment.
- The arrangement of the controls.
- The performance of the protective system, if the reference zone within the head impact zone determined according to annex 8 (dynamic evaluation) is chosen by the applicant. Vehicles that differ only in the performance of the protective system(s) belong to the same vehicle type if they offer an equal or better protection for the occupants compared with the system or vehicle submitted to the technical service responsible for conducting the approval tests.

(UN, Reg.24) means a category of power-driven vehicles which do not differ in such essential respects as the vehicle and engine characteristics.

- Vehicle characteristics:
 - i. Make.
 - ii. Type.
 - iii. Name and address of manufacturer.
 - iv. Engine Type and approval No.
- Engine characteristics
- v. Make.
- vi. Trade mark.
- vii. Name and address of manufacturer.
- viii. Type(s).
- ix. Cycle: four-stroke/two-stroke/others.
- x. Bore: in millimetres
- xi. Stroke: in millimetres
- xii. Cylinder capacity: in cm³
- xiii. Number and layout of cylinders and firing order.
- xiv. Combustion system: description.
- xv. Drawings of combustion chamber and piston crown.
- xvi. Compression ratio.

xvii. Minimum cross-section area of inlet and outlet ports.

(UN, Reg.25) means a category of power driven vehicles which do not differ in such essential respects as:

- The lines and internal dimensions of the bodywork constituting the passenger compartment.
- The types and dimensions of the seats.
- Type and dimensions of head restraint attachment and of the relevant parts of the vehicle structure in the case of head restraint directly anchored to the vehicle structure.

(UN, Reg.26) means a category of motor vehicles which do not differ in such essential respects as, shape or materials of the external surface.

(UN, Reg.28) shall be understood to mean vehicles not essentially different from another with respect to such matters as:

- the number and type(s) of warning devices fitted on the vehicle.
- the mountings used to fit the warning devices to the vehicle.
 - the position of the warning devices on the vehicle.
 - the rigidity of the parts of the structure on which the warning device(s) is (are) mounted.
 - The shape and materials of the bodywork at the front of the vehicle which might affect the level of the sound emitted by the warning device(s) and have a masking effect.

(UN, Reg.29) means a category of motor vehicle which does not differ in such essential respects as:

- The dimensions, shapes and materials of the components of the vehicle cab.
- The manner of attachment of the cab to the chassis frame.

(UN, Reg.32) means a category of power-driven vehicles which do not differ in such essential respects as:

- The length and width of the vehicle in so far as they have an effect on the results of the impact test.
- The structure, dimensions, lines and materials of the part of the vehicle rearward of the transverse plane through the "R" point of the rearmost seat.
- The lines and inside dimensions of the passenger compartment in so far as they have an effect on the results of the impact test.
- The sitting of the engine, front, rear or centre.

(UN, Reg.33) means a category of power-driven vehicles which do not differ in such essential respects as:

- The length and width of the vehicle in so far as they have an effect on the results of the impact test.
- The structure, dimensions, lines and materials of the part of the vehicle forward of the transverse plane through the "R" point of the driver's seat.
- The lines and inside dimensions of the passenger compartment in so far as they have an effect on the results of the impact test.
- The sitting of the engine, front, rear or centre.

(UN, Reg.34) means vehicles which do not differ in such essential respects as:

- The manufacturer's type designation.
- In vehicles of category M₁ the position of the tank(s) in the vehicle in so far as it has a negative effect. Tanks shall be installed in such a way as to be protected from the consequences of a collision to the front or the rear of the vehicle; there shall be no protruding parts, sharp edges, etc. near the tank.
- The structure, shape, dimensions and materials, metal or plastic, of the tank(s).
- The characteristics and sitting of the fuel feed system.
- The characteristics and sitting of the electrical installation in as far as they have an effect on the results of the collision tests.

(UN, Reg.35) means a category of motor vehicles which do not differ in respect of the structure and internal arrangements which may affect the location and operation of the foot controls.

(UN, Reg.36) means vehicles which do not differ essentially with regard to the constructional features.

(UN, Reg.39) means vehicles which do not among themselves display any essential differences, where those differences can apply, in particular, to the following:

- The size designation of the tyres chosen from the range of tyres normally fitted.
- The overall transmission ratio, including any reduction drives, to the speedometer.
- The type of speedometer as characterised by:
 - i. The tolerance of the speedometer's measuring mechanism.
 - ii. The technical constant of the speedometer.
 - iii. The range of speeds displayed.

(UN, Reg.40 and 47) means a category of power-driven vehicles which do not differ in such essential respects as:

- The equivalent inertia determined in relation to the reference weight as prescribed in the following table.

Reference weight (kg)	Equivalent inertia (kg)	Power absorbed (kW)
R < 105		0.88
105 < R < 115		0.90
115 < R < 125		0.91
125 < R < 135		0.93
135 < R < 150		0.94
150 < R < 165		0.96
165 < R < 185		0.99
185 < R < 205		1.02
205 < R < 225	1.00110120130e+50	1.05
225 < R < 245		1.09
245 < R < 270		1.14
270 < R < 300		1.17
300 < R < 330		1.21
330 < R < 360		1.26
360 < R < 395		1.33
395 < R < 435		1.37
435 < R < 475		1.44

- The engine and vehicle characteristics.
(UN, Reg.42) means a category of power-driven vehicles which do not differ in such essential respects as:
 - The length and width of the vehicle, and the structure, dimensions, lines and materials of the front and rear parts of the vehicle in so far as they have an effect on the results of the impact test.
 - The sitting, front, rear or centre and weight of the engine.
 - The characteristics of the suspension, to the extent that they affect the results of the impact test.
- (UN, Reg.45) means vehicles which do not differ in such essential respects as:
 - The type of headlamp cleaner.
 - The geometric arrangement of the headlamp cleaning equipment, if this implies any modification of its operation.
 - Capacity class of the fluid container.
- (UN, Reg.49) means a category of power driven vehicles which do not differ in such essential respects as the vehicle and engine:
 - Make, name of undertaking
 - Type and commercial description, mention any variants
 - Means and location of identification of type, if marked on the vehicle
 - Category of vehicle, if applicable
 - Category of engine: diesel/NG fuelled/LPG fuelled/ethanol fuelled
 - Name and address of manufacturer
 - Location of statutory plates and inscriptions and method of affixing
 - In the case of components and separate technical units, location and method of affixing of the ECE approval mark
 - Address(es) of assembly plant(s)
- (UN, Reg.50, 53, 74 and 113) means a category of vehicles which do not differ from each other in such essential respects as:
 - The dimensions and external shape of the vehicle.
 - The number and position of the devices.
 - The following shall likewise not be deemed to be “vehicles of a different type:
 - i. Vehicles which differ within the meaning of either the dimensions and external shape of the vehicle or the number and position of the devices, but not in such a way as to entail a change in the kind, number, position and geometric visibility of the lamps prescribed for the vehicle type in question.
 - ii. Vehicles on which lamps approved under one of the Regulations annexed to the 1958 Agreement, or lamps allowed in the country in which the vehicles are registered, are fitted, or are absent where their fitting is optional.
- (UN, Reg.51) means a category of motor vehicles which do not differ in such essential respects as:
 - The shape or materials of the bodywork (particularly the engine compartment and its soundproofing);
- The length and width of the vehicle;
- The type of engine (positive or compression ignition, two- or four-stroke, reciprocating or rotary piston), number and capacity of cylinders, number and type of carburettors or injection system, arrangement of valves, rated maximum power and corresponding engine speed(s), or the type of electric motor;
- The transmission system, the number of gears and ratios;
- The noise reduction system.
- Vehicles other than those in categories M₁ and N₁ having the same type of engine and/or different overall gear ratios, may be regarded as vehicles of the same type. However, if the above differences provide for a different test method, these differences are to be considered as a change of type.
- (UN, Reg.52) means a category of vehicles which do not differ essentially with regard to the constructional features.
- (UN, Reg.55) means vehicles which do not differ in such essential respects as the structure, dimensions, shape and materials in areas to which the mechanical coupling device or component is affixed. This applies to both the towing vehicle and trailer.
- (UN, Reg.58) means vehicles which do not differ in such essential aspects as:

- The width of the rear axle.
- The structure, the dimensions, the shape and the height from the ground of the rear part of the vehicle and the characteristics of the suspension.
- The approved RUPDs fitted to the vehicle.
 - (UN, Reg.59) means a category of motor vehicles which do not differ significantly in such respects as:
 - The lines and constituent materials of the body (more particularly the engine compartment and its soundproofing).
 - The length and width of the vehicle.
 - The type of engine (positive ignition, compression ignition, two stroke or four stroke, reciprocating or rotary, hybrid-electric engine type), number and capacity of cylinders, number of carburettors or injection system, arrangement of valves, rated maximum power and corresponding engine speed (rpm) or the type of the electric motor.
 - Number and ratios of gears, total ratio of the transmission.
 - The number, type and arrangement of the exhaust systems.
 - The number, type and arrangement of the intake systems.
 - (UN, Reg.60) means a category of power-driven vehicles which do not differ in respect of the arrangements which may affect the function or position of the driver-operated controls.
 - (UN, Reg.61) means motor vehicles which do not differ in such essential respects as the external projections.
 - (UN, Reg.62) means a category of power-driven vehicles which do not differ in such essential respects as:
 - The manufacturer's indications of the vehicle type
 - The arrangements and design of the vehicle component or components on which the protective device acts.
 - The type of protective device.
 - (UN, Reg.64) means a category of vehicles which do not differ significantly in such essential aspects as:
 - Vehicle type with regard to its temporary-use spare unit:
 - i. The maximum axle loads of the vehicle.
 - ii. The characteristics of the temporary-use spare wheel and tyre unit.
 - iii. The method of drive, front wheel, rear wheel, four wheels.
 - iv. The suspension.
 - v. The braking system.
 - vi. The wheel size/tyre size.
 - vii. The wheel offset.
 - Vehicle type with regard to its tyre pressure monitoring system:
 - viii. The manufacturer's trade name or mark.
 - ix. Vehicle features which significantly influence the performances of the tyre pressure monitoring system.
 - x. The type and design of the tyre pressure monitoring system.
 - (UN, Reg.66) means a category of vehicles produced with the same design technical specification, main dimensions and constructional arrangement. The vehicle type shall be defined by the vehicle manufacturer.
 - (UN, Reg.67) means a vehicle or a family of vehicles fitted with specific equipment for the use of LPG in its propulsion system, which do not differ with respect to the following conditions:
 - The manufacturer.
 - The type designation established by the manufacturer.
 - The essential aspects of design and construction.
- Chassis/floor pan (obvious and fundamental differences).
 - Installation of the LPG equipment (obvious and fundamental differences).
- (UN, Reg.73) means vehicles which do not differ in such essential aspects as:
 - The width of the rear axle.
 - The structure, the dimensions, the shape and the height from the ground of the sides of the vehicle and the characteristics of the suspension.
 - The approved LPD fitted to the vehicle.
- (UN, Reg.78) means a sub-category of L-category vehicles which do not differ in such essential respects as:
 - The vehicle category.
 - The gross vehicle mass.
 - The distribution of the mass between the axles.
 - Vmax.
 - A different type of braking device.
 - The number and arrangement of the axles.
 - The engine type.
 - The number and ratios of gears.
 - The final drive ratios.
 - The tyre dimensions.
- (UN, Reg.79) means a vehicle which does not differ with respect to the manufacturer's designation of the vehicle type and in essential characteristics such as:
 - Type of steering equipment, steering control, steering transmission, steered wheels, and energy source.
- (UN, Reg.80) means vehicles which do not differ essentially in respect of:
 - The constructional features.
 - The type or types of type approved seat(s) fitted to the vehicle, if any.
- (UN, Reg.83 and 103) means a group of vehicles that do not differ in the following respects:
 - The equivalent inertia determined in relation to the reference mass as prescribed in the table below:

Reference mass of vehicle RW (kg)	Equivalent inertia kg	Power and load absorbed by the dynamometer at 80 km/h		Road Load Coefficients	
		kW	N	a (N)	b(N/kph)
RW ≤ 480	455	3.8	171	3.8	0.0261
480 < RW ≤ 540	510	4.1	185	4.2	0.0282
540 < RW ≤ 595	570	4.3	194	4.4	0.0296
595 < RW ≤ 650	625	4.5	203	4.6	0.0309
650 < RW ≤ 710	680	4.7	212	4.8	0.0323
710 < RW ≤ 765	740	4.9	221	5.0	0.0337
765 < RW ≤ 850	800	5.1	230	5.2	0.0351
850 < RW ≤ 965	910	5.6	252	5.7	0.0385
965 < RW ≤ 1080	1020	6.0	270	6.1	0.0412
1080 < RW ≤ 1190	1130	6.3	284	6.4	0.0433
1190 < RW ≤ 1305	1250	6.7	302	6.8	0.0460
1305 < RW ≤ 1420	1360	7.0	315	7.1	0.0481
1420 < RW ≤ 1530	1470	7.3	329	7.4	0.0502
1530 < RW ≤ 1640	1590	7.5	338	7.6	0.0515
1640 < RW ≤ 1760	1700	7.8	351	7.9	0.0536
1760 < RW ≤ 1870	1810	8.1	365	8.2	0.0557
1870 < RW ≤ 1980	1930	8.4	378	8.5	0.0577
1980 < RW ≤ 2100	2040	8.6	387	8.7	0.0591
2100 < RW ≤ 2210	2150	8.8	396	8.9	0.0605
2210 < RW ≤ 2380	2270	9.0	405	9.1	0.0619
2380 < RW ≤ 2610	2270	9.4	423	9.5	0.0646
2610 < RW	2270	9.8	441	9.9	0.0674

(UN, Reg.84) means a category of power-driven vehicles which do not differ in such essential respects as: body, engine, transmission, tyres and unladen mass.

(UN, Reg.89) means vehicles which do not differ in such essential respects as:

- The make and type of the SLD.
- The range of speeds at which the limitation may be set within the range established for the test vehicle.
 - The ratio of maximum engine power/unladen mass, less than or equal to that of the tested vehicle.
 - The highest ratio of engine speed/vehicle speed in top gear, less than or equal to that of the tested vehicle.

(UN, Reg.93) means vehicles which do not differ in such respects as:

- The width of the foremost axle measured at the outermost part of the tyres excluding the bulging of tyres close to the ground.
- The structure, the dimensions, the shape and materials of the front part of the vehicle.
- The approved FUPDs fitted to the vehicle.
- The maximum mass of the vehicle type.

(UN, Reg.94) means a category of power-driven vehicles which do not differ in such essential respects as:

- The length and width of the vehicle, in so far as they have a negative effect on the results of the impact test.
- The structure, dimensions, lines and materials of the part of the vehicle forward of the transverse plane through the “R” point of the driver’s seat, in so far as they have a negative effect on the results of the impact test.
- The lines and inside dimensions of the passenger compartment and the type of protective system, in so far as they have a negative effect on the results of the impact test.
- The sitting (front, rear or centre) and the orientation (transversal or longitudinal) of the engine, in so far as they have a negative effect on the result of the impact test.
- The unladen mass, in so far as there is a negative effect on the result of the impact test.
- The optional arrangements or fittings provided by the manufacturer, in so far as they have a negative effect on the result of the impact test.

- The locations of the RESS, in so far as they have a negative effect on the result of the impact test.

(UN, Reg.95) means a category of power-driven vehicles which do not differ in such essential respects as:

- The length, width and ground clearance of the vehicle.
- The structure, dimensions, lines and materials of the side walls of the passenger compartment.
- The lines and inside dimensions of the passenger compartment and the type of protective systems.
- The sitting of the engine, front, rear or centre, and the orientation, transversal or longitudinal, of the engine.
- The unladen mass.
- The optional arrangements or interior fittings.
- The type of front seat(s) and position of the “R” point.
- The locations of the RESS.

(UN, Reg.100) means vehicles which do not differ in such essential aspects as:

- Installation of the electric power train and the galvanically connected high voltage bus.
- Nature and type of electric power train and the galvanically connected high voltage components.

(UN, Reg.101) means a category of power driven vehicles which do not differ in such essential respects as body, power train, transmission, traction battery (if applicable), tyres and unladen mass.

(UN, Reg.102) means vehicles which do not differ in such essential respects as:

- The make and type of the close-coupling device.
- The length and width of the vehicles.
- The mass of the vehicles.
- The points of attachment of the close-coupling device.
- The vehicle description (e.g. truck, tractor, trailer, semi-trailer, centre-axle trailer).
- Steering equipment (e.g. auxiliary steering equipment, steering equipment of the trailer).

(UN, Reg.107) means vehicles, which do not differ in the following essential aspects:

- Bodywork manufacturer.
- Chassis manufacturer.
- Vehicle concept (> 22 passengers or ≤ 22 passengers).
- Bodywork concept (single / double-deck, articulated, low-floor).
- Bodywork type if the bodywork has been approved as a separate technical unit.

(UN, Reg.111) means a category of vehicle which does not differ in such essential respects as:

- Vehicle category, (N₂, N₃, O₃ and O₄ intended for the carriage of dangerous goods as defined in the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) agreements) and type (truck, full trailer, semi-trailer, centre-axle trailer).
- Maximum mass.
- Cross-section profile of the tank (circular, elliptical, maxi volume).
- Maximum height of the centre of gravity of the laden vehicle.
- Distribution of mass among the axles (including fifth wheel).
- Number and arrangement of the axles (including axle spacing).
- Suspension arrangements in relation to roll characteristics.
 - Tyre size and structure (radial ply, diagonal ply or bias belted).
 - Track width.
 - Wheel base.

(UN, Reg.114) means a category of power-driven vehicles, which do not differ in such essential respects in so far as they have an effect on the results of the impact tests:

- The structure, dimension, body version and materials of the vehicle.
- The unladen kerb mass.
- The steering control, the seat and the safety-belt system and other restraint systems.
- The sitting and orientation of the engine.
- The parts and optional arrangements or fittings of the vehicle which influence the performance of the airbag.

(UN, Reg.116) means a category of motor vehicles which do not differ in such essential respects as:

- The manufacturer's type designation.
- The arrangement and design of the vehicle component or components on which the device to prevent unauthorized use acts.
- The type of device to prevent unauthorized use.

(UN, Reg.118) means vehicles that do not differ in such essential respects as the manufacturer's type designation.

(UN, Reg.121) means motor vehicles, which do not differ in respect of the internal arrangements, which may affect the identification of symbols for controls, tell-tales, and indicators and operation of controls.

(UN, Reg.133) means vehicles of a particular category which do not differ in at least the following essential respects:

- The manufacturer.
- The manufacturer's type designation.
- Essential aspects of construction and design.
 - Chassis/floor pan (obvious and fundamental differences).

WINDSCREEN (GRSP, GRSG)

(UN, Reg.29 and 127) means the frontal glazing of the vehicle situated between the A-pillars.

(UN, Reg.43) means the glazing in front of the driver through which the driver views the road ahead.
