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**Vehicle Standards — Specification for Vehicle Roadworthiness —
Part 2: Roadworthiness of vehicles prior to entry into service, and
thereafter**

Version *[Insert Version Number]*

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Foreword

SADCSTAN (Southern African Development Community Cooperation in Standardization) is mandated by the SADC Council of Ministers to coordinate Standardisation activities and services in the region with the purpose of achieving harmonisation of standards in support of the objectives of the SADC protocol on trade.

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This document was prepared by *[insert name of committee or subcommittee]*.

This *[Insert edition number]* edition cancels and replaces the edition *[Insert edition number]*, which has been technically revised. It also incorporates the Amendments *[Insert edition number(s)]*.

The main changes compared to the previous edition are as follows:

— *[List changes here]*

Foreword (Cont.)

This specification consists of the following parts under the general title “Specification for vehicle Roadworthiness”

Part 1: Roadworthiness of vehicles already in service

Part 2: Roadworthiness of vehicles prior to entry into service and thereafter

Part 3: Roadworthiness – Supporting Information

Part 4: Roadworthiness – Requirements for vehicle examiners

Part 5: Roadworthiness - Requirements for testing equipment

Part 6: Roadworthiness – Requirements for combinations of vehicles

0 Introduction

0.1 Reference to Part 1

The Foreword and Introduction of Part 1 of this specification are also relevant to this Part 2 which focusses on a method to introduce higher levels of design safety in vehicles in the future.

0.2 Vehicle design safety standards

Provision is made in this Part 2 for the subsequent mandatory introduction of design safety standard requirements intended to ensure higher standards of safety for vehicles entering into service in the future and thereafter whenever roadworthiness testing is required.

0.3 Important Considerations

The introduction of reasonably modern vehicle design standards is best achieved by following some of the United Nations Regulations (UN ECE Regulations), but preferably only those which are considered to return the maximum benefits in safety. Provision must also be made for the acceptance of national domestic standards giving equivalent levels of safety to those of the UN ECE Regulations. For such vehicle design requirements to be introduced requires, amongst other things:-

- a) Early warning and clear notification to suppliers of new and used vehicles that only vehicles which embody certain vehicle design requirements will be accepted for entry into service after a given date to be decided by each recipient nation or region.
- b) Adequate lead times between publication of the requirements and implementation of the requirements. Bearing in mind the preparatory times needed for the completion and introduction of these specifications, and the lead times needed thereafter by all role players in the supply chain, a date as specified in Part 2 Clause 5.3 of this draft specification is suggested for consideration.
- c) The question of whether these new vehicle design requirements need to be prescribed in separate legislation covering “equipment on vehicles” or whether they can be introduced as requirements for roadworthiness testing as proposed in “Part 2: Roadworthiness of vehicles prior to entry into service and thereafter”, has been considered. The conclusion has been that provided this specification is made mandatory then additional legislation covering equipment on vehicles is not required.
- d) A system of compliance assessment to such UN ECE or national equivalent regulations and specifications which is simple to apply is required. The system proposed at least for the first few years is based on visual inspection of individual vehicles for indications of compliance. Such visual indicators must also be able to be applied before sourcing and shipment to Africa and at a Roadworthiness Testing Station before entry into service. (Note that the cost and complexity of physically testing for compliance is prohibitive and destructive and it is not feasible for private importers to obtain certificates of compliance from vehicle manufacturers since there are often no business connections and the vehicle brand and model variety is massive).
- e) An alternative to c) would be to legislate to permit only vehicles younger than say 5 or 10 years to be allowed to enter into service.

0.4 Limitations

Mandating design safety standards for future compliance after an adequate lead time is technically the proper way to go but requires “approval systems” to provide some degree of assurance that such design requirements are being met. The cost and complexity of introducing comprehensive “approval systems” is in many cases prohibitive. The simple visual methods proposed in this Part 2 of the specification will

give movement and improvement towards upgrades in vehicle safety design, but cannot be considered as final. Alternative approval systems are detailed in Part 3 of this specification for perusal.

0.5 Views of Individual Countries

Individual countries are requested to please provide their views on the date upon which certain requirements should be introduced to vehicles entering into service. The current proposed dates are specified in this Part 2, Clause 5.3.

Vehicle Standards — Specification for Vehicle Roadworthiness — Part 2: Roadworthiness of vehicles prior to entry into service, and thereafter

1 Scope

1.1 Scope of Part 1

Part 1 of this specification covers the requirements for the examination and testing for roadworthiness of motor vehicles operating within the borders of member countries of SADC, COMESA and EAC and across the borders of member countries of these regions.

1.2 Application

This specification applies minimum safety requirements. It is not intended to cover all of the specific national safety requirements of countries for vehicles registered and operating within their borders but wherever possible countries are requested to standardise on the criteria contained in this specification.

1.3 Demarcation

Requirements are included only for items which are critical to safety and which can be assessed by a vehicle examiner with the facilities of a vehicle testing station complying with the appropriate requirements laid down in national legislation for vehicle examiners and vehicle testing stations.

1.4 Provision for imported vehicles

This specification takes into account that in the SADC, EAC and COMESA regions vehicles may be imported from a variety of countries or regions and such vehicles may have been designed to comply with the domestic requirements of specific source countries or regions anywhere in the world.

1.5 Scope of Part 2

Part 2 of this specification deals with methods and considerations to provide for the future introduction of more advanced safety requirements such as those detailed in Table 1 whilst offering options to minimize costly and burdensome technical and administrative controls and procedures. It caters for the situation where many countries or regions have requirements which differ in certain detail, but which are intended and designed to afford a reasonable degree of safety to the vehicle occupants and to other road users. Examples of where differences between national or regional requirements do, or may exist, but which are considered as providing an equal or an acceptable degree of safety are given in Table 2 using UN ECE Regulations as the base.

2 Notes to Users

2.1 Applicability of requirements

- a) The requirements in this Part 2 deal with design safety standards which are to be considered for future application to vehicles at some stage of procurement before entry into service and thereafter. These requirements are additional to those in Part 1.

- b) This specification does not cover special requirements or concessions for roadworthiness certification for cross border operation, other than referring to cases where national or regional legislation may take preference over the requirements of this specification.

2.2 Abbreviations

RHD means right hand drive designed for operation in countries where traffic drives on the left.

LHD means left hand drive designed for operation in countries where traffic drives on the right.

2.3 Definitions

“Approval authority” is the authority responsible for checking design compliance of vehicles entering into service for the first time. This may be a Roadworthiness Testing Centre qualified for this function, or some other body.

“Approval systems” are systems operated by an approval authority intended to provide some degree of assurance that compliance with vehicle design safety standards has been achieved.

“Date of entry into service” is the date on which the vehicle was licensed or registered for the first time in the country in which it is being operated.

“Degrees of assurance of compliance” result from the adoption of the following approval systems:-

- a) Maximum degree of assurance – if test reports from acceptable sources are made available and if test equipment is available locally to re-test in cases of doubt.
- b) Lesser degree of assurance – if the vehicles are received only from countries which are known to apply similar standards to their domestic and export production and if the vehicles are not older than 5 years.
- c) Minimal degree of assurance – if the vehicles and the owner's manuals are inspected visually for some indications that the vehicle is likely to incorporate some or all of the required design safety standard requirements.

“Vehicle design compliance” is compliance to a design standard which has been published by a national or regional body.

“FIA” is the Federation Internationale de l'Automobile being the governing body of motor sport and which promotes safe, sustainable and accessible mobility for all road users across the world.

“UN ECE” is the United Nations Economic Commission for Europe.

“Vehicle category definitions” are included under Part 3 Annex 5

2.4 Terminology

Non-specific terms such as excessive, extensive, significant, impaired and such like expressions are used where finite limits are inappropriate to apply, and the Vehicle Examiner is the final arbiter in such cases.

3 Administrative Requirements.

3.1 Application Form.

The vehicle examiner shall check that the Application Form for Vehicle Design Compliance is fully relevant to the vehicle to be examined. In particular, the vehicle examiner shall inspect and record the VIN or Chassis Number and, if applicable, Registration Plate details by obtaining these from the vehicle itself and not from any documentation, then checking these details against the detail on the Application Form.

3.2 Evidence of Vehicle having been presented.

The vehicle examiner shall take photographs of the vehicle showing its front $\frac{3}{4}$ including its registration plate and at the same time showing the testing station in the background. Additional photographs showing the rear $\frac{3}{4}$ of the vehicle and its body together with a photograph of the VIN or chassis number shall also be taken and filed.

(Additional requirements to minimise fraud are intended to be introduced such that all documents including photographs will contain fingerprints, dates, signatures and GPS co-ordinates.)

3.3 Vehicle Design Compliance Certificate.

Vehicles complying with the requirements of this Part 2 of the specification shall carry this vehicle design compliance certificate on the vehicle.

4 Procedural matters regarding the actual test

4.1 Circumstances where an examiner may refuse to examine a vehicle or to complete an examination

- a) If the information on the vehicle does not correspond with the information on the application
- b) if the information on the vehicle appears to have been tampered with
- c) if the vehicle is so dirty that the examiner would be unable to examine it efficiently
- d) if the vehicle cannot be started or driven
- e) if a defect is detected which renders the vehicle unsafe or otherwise presents a risk to the examiner
- f) in cases where the vehicle has been adapted to suit a disabled driver and the examiner is unable to drive it with a reasonable degree of safety.

5 Assessment of Compliance to Vehicle Design Safety Standards applicable on “date of entry into service”and thereafter

For vehicles entering into service for the first time from the date listed in Table 1 and thereafter as part of the normal roadworthiness checking for such vehicles, from the appropriate date

5.1 Evidence of compliance – Reject if

- a) there are no test reports or certification from acceptable sources being presented for assessment to show that that the vehicle and its equipment was manufactured to comply with each of the vehicle

design safety standards listed in Table 1 or to the equivalent standards of the countries or regions listed in Table 2 and which are appropriate to the vehicle category, or

- b) any of the following visual assessment indicators are absent which are indicative of whether compliance with the appropriate design standards is likely to have been achieved, or
- c) compliance with a) or b) above cannot be ascertained and the vehicle is older* than 5 years.

NOTE In other words, if younger than 5 years the vehicle design safety standards need not be assessed.

5.2 Visual assessment indications – Reject if

- a) Braking – the ABS piping or sensors or wiring or control panel indicators are not fitted, and if ESC is required to be fitted, when an ESC indicator is not present, and if brakes are not fitted to all the wheels on the vehicle.
- b) Lighting - the colour, intensity, switching and positioning of all lighting and signalling and reflective equipment is not standard according to the experience of the examiner with other similar vehicle models
- c) Contour tape is not “E-marked” and showing “R104”
- d) Chevrons are not of the dimensions and material of the high intensity grade retro-reflective material listed in Part 1 Annex 2, or which comply with the requirements of UN ECE R69 vehicles designed not to exceed 30km/h, or UN ECE R70 long and heavy goods vehicles
- e) Safety glass is not “E-marked” and showing “R43” and in addition windscreens are not marked “laminated” or marked “//”
- f) Mirror housings or mirror glass are not E-marked or are not of the normally acceptable radius of curvature, and exterior mirrors are not in place at each side of the vehicle. Additionally in the case of goods vehicles over 7 500kg GVM if there are no additional “wide angle” mirrors which show the road to the immediate left and right of the driver generally as shown in Part 3.
- g) Tyres are not E-marked or DoT marked or showing the markings of another approval authority and passenger tyres do not have a tread wear indicator
- h) Emission control system has no catalytic converter fitted, or if warning systems indicate that maintenance of the emission system is required, or for testing stations which have emission testing equipment and limits laid down in national legislation, such limits are exceeded.
- i) Safety belts do not bear a certification label or marking (such as E-marking) on a label or on the tongue and are not inertia type on front outboard seats of all vehicle categories, and on rear outboard seats of passenger cars, and there are not two levels of driver alert to warn the driver if the driver’s safety belt is not fastened
- j) Rear underrun dimensions and position do not correspond to the details given in Part 1, Section 5.20 or the rear structure does not provide for similar impacting characteristics to the Note in Part 1, Section 5.20.
- k) Speedometer is not fitted or if it is not functioning or is not in the correct units for the recipient country
- l) Audible warning is unacceptably loud or weak

- m) Warning triangle is not supplied and is not “E-marked” and showing “R27”
- n) Frontal collision - the presence of airbags is not indicated on dashboard, A or B-pillars, sun visor, safety belts, owner's manual or warning lights.
- o) Side impact – the presence of airbags is not indicated in the vehicle or in the owner’s manual or the airbag check-light does not illuminate when the ignition is switched on
- p) Tilt angle for buses** – adequate documentary evidence cannot be supplied to support 28 degrees tilt
- q) Strength of superstructure of buses** – adequate documentary evidence cannot be supplied to support compliance.
- r) There is no evidence that outstanding safety recall procedures have been conducted.

**Compliance with these requirements is not possible to assess visually and as such, members may wish to exempt compliance, unless means can be found to source documentary evidence of compliance.

5.3 Transitional provisions and additional requirements gazetted in the Vehicle Quality Regulations:-

- (1) The requirements under (a) to (d) are suspended for a period of 6 months and the requirements listed under (e) {and (g)} are suspended for a period of 18 months, from the date that they are gazetted under the Vehicle Quality Regulations-
 - (a) Warning sign on the rear of motor vehicles (chevrons) – Part 1, Clause 5.5.5 c) – (Regulation XX)
 - (b) Side and rear contour reflective material – Part 1, Clause 5.5.5 b) – (Regulation XX)
 - (c) Emergency warning signs (Triangle) – Part 1 – Clause 5.28 a) – (Regulation XX)
 - (d) Wheel flaps – Part 1, Clause 5.19 a) – (Regulation XX)
 - (e) Rear underrun protection device – Part 1, Clause 5.20 – Regulation 94
 - (f) ~~Regulation No XX – Axle or axle unit to be fitted to semi-trailer – Part 1, Clause 5.17.5 a)~~
 - (g) ~~Regulation No XX Brakes must act on all wheels of trailers – Part 1, Clause 5.3.6 b)~~
- (2) In addition to the requirements of Regulations 23 to Regulation 95 in the Vehicle Quality Regulations, a vehicle to be introduced for entry into service and

operation on public roads 18 months after the date such regulations are gazetted, must be inspected to comply with the requirements detailed in Table 1 relevant to the category of vehicle, or may alternatively comply with the national requirements of the countries detailed in Table 2.

Table 1 – Requirements for Vehicles entering into service 18 months after the date the regulations are gazetted in the Vehicle Quality Regulations.

Type of Equipment	UN ECE Regulation or TTTP Standard	Categories of vehicles affected	Minimum level of UN ECE Regulation to be applied. Compliance to any later version of UN ECE Regulation is acceptable or to the equivalent national regulation of the country of origin shown in Table 2
Braking	ECE R13H	Passenger vehicle up to 9 seats including driver, and goods vehicles up to 3500kg GVM	Revision 2, Supplement 11 to original regulation – 30 January 2011
	ECE R13	Buses with 10 or more seats and goods vehicles over 3500kg GVM	Revision 7, Supplement 5 to 11 Series of amendments- 30 January 2011
Lighting	ECE R48	All	Revision 3, Supplement 8 to 02 Series of amendments – 12 August 2004
Contour tape	ECE R104	Buses with 10 or more seats including driver and goods vehicles over 3500kg GVM or over 7m long	UN ECE R104
Chevrons	Roadworthiness Part 1 Annex 2, or SANS 1329*4	Over 3500kg GVM	UN ECE R69 and R70 are alternatives to the requirements in Column 2
Safety glass	ECE R43	All	Revision 2, Supplement 4 to 02 series of amendments – 26 July 2012
Rear view	ECE R46	All	Revision 3, Supplement 4 to 02 Series of amendments – 22 July 2009

Type of Equipment	UN ECE Regulation or TTTP Standard	Categories of vehicles affected	Minimum level of UN ECE Regulation to be applied. Compliance to any later version of UN ECE Regulation is acceptable or to the equivalent national regulation of the country of origin shown in Table 2
Tyres - passenger	ECE R30	Passenger	Revision 2, Supplement 9 to the 02 Series of amendments - 06 February 1999
Tyres - commercial	ECE R54	Passenger & Goods	Revision 2, Supplement 15 to original regulation - 30 October 2003
Emissions- Light vehicles	Euro 4	Applied in EU to new registrations 01 January 2006	UN ECE R83.05 or 70/220 EEC amended by 2003/76/EC
Emissions - HCV	EURO II	Applied in EU during 1995	UN ECE R49 or 94/12/EC
Safety belts	ECE R16	All	Revision 7, Supplement 2 to 06 Series of amendments - 26 July 2012
Rear underrun	ECE R58	Goods vehicles over 3500kg GVM	Revision 2, Supplement 02 Series of amendments - 11 July 2008
Speedometer	ECE R39	All	
Audible warning	ECE R28	All	
Warning triangle	ECE R27	All	Revision 1, Supplement 1 to the 03 Series of amendments - 18 January 1998
Frontal collision	ECE R94	Passenger vehicles up to 9 seats including driver	Revision 1, Supplement 3 to the 02 Series of amendments - 02 February 2007
Lateral collision	ECE R95	Passenger vehicles up to 9 seats including driver	Revision 1, Supplement 03 Series of amendments - 23 June 2011

Tilt angle stability test	28 Degree Tilt	10 or more seats, M2 & M3 but using 68kg / person	Revision 3, Supplement 7 to the 02 Series of amendments – 23 June 2011. Clause 7.4
Superstructure	ECE R66	More than 22 passengers	Revision 1, Supplement 1 to the original – 09 November 2005
Data Plate	Part 1, Clause 5.2	Goods vehicles < 3500kg GVM and passenger cars	Showing the GVM, GCM & front and rear axle capacities.
Data Plate	Part 1, Clause 5.2	Goods vehicles over 3500kg GVM and passenger vehicles with 10 or more seats and trailers.	Showing manufacturers technically permissible masses and the legally permissible masses.
Brakes on all wheels	Part 1, Clause 5.3.7 c)		
Single type of semi-trailer suspension	Part 1, Clause 5.17.5 a)		

Table 2 – Alternative requirements to those of the UN ECE Listed in Table 1 according to the domestic legislation of the countries listed below.

In this table, the following definitions applied by UN ECE and the EU for passenger and goods vehicles apply:

“**Category M**” means passenger vehicles subdivided into the following sub-categories-

“**M1**” means a motor vehicle that is used for the carriage of passengers, that has at least four wheels, and that has seating accommodation for not more than eight passengers in addition to the driver of the vehicle.

“**M2**” means a motor vehicle that is used for the carriage of passengers, that has at least four wheels, and that has seating accommodation for more than eight passengers in addition to the driver of the vehicle, and that has a maximum mass not exceeding five tons.

“**M3**” means a motor vehicle that is used for the carriage of passengers, that has at least four wheels, that has seating accommodation for more than eight passengers in addition to the driver of the vehicle, and that has a maximum mass exceeding five tons.

“**Category N**” means goods vehicles subdivided into the following sub-categories-

“**N1**” means a motor vehicle that has a maximum mass not exceeding three comma five tons, that has at least four wheels or three wheels provided that the maximum mass exceeds one ton, and that is used for the carriage of goods.

“**N2**” means a motor vehicle that is used for the carriage of goods and that has a maximum mass of more than three comma five tons but not more than 12 tons.

“N3” means a motor vehicle that is used for the carriage of goods and that has a maximum mass exceeding 12 tons.

“Category O” means trailers sub-divided into the following sub-categories-

“O1” means a single axle trailer, other than a semi-trailer, with a maximum mass not exceeding zero comma seven five tons.

“O2” means a trailer, other than a category O1 trailer, with a maximum mass not exceeding three comma five tons.

“O3” means a trailer with a maximum mass exceeding three comma five tons but not exceeding 10 tons.

“O4” means a trailer with a maximum mass exceeding 10 tons.

Type of Equipment	UN ECE Regulation or TFTP Standard	Categories of vehicles affected	Standards of other nations which are understood to be directly equivalent to UN ECE or which are based on similar and adequate requirements and are functionally* equivalent
Braking	ECE R13H	M1, N1	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
	ECE R13	M2/M3, N2/N3	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Lighting	ECE R48	All	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Contour tape	ECE R104	M2/M3, N2/N3 + Goods over 7m & all O	EU, Australia, China, Korea, Brazil, Gulf States
Safety glass	ECE R43	All	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Rear view	ECE R46	All	EU, Australia, Japan, USA
Tyres - passenger	ECE R30	Passenger	EU, Australia, China, Japan, USA
Tyres commercial	ECE R54	Passenger & Goods	EU, Australia, China, USA
Emissions- Light vehicle	Euro 2	Passenger & Goods	EU, Australia, China, Japan, USA
Emissions - HCV	Euro 2	Passenger & Goods	EU, Australia, China, Japan, USA

Type of Equipment	UN ECE Regulation or TTTP Standard	Categories of vehicles affected	Standards of other nations which are understood to be directly equivalent to UN ECE or which are based on similar and adequate requirements and are functionally* equivalent
Safety belts -	ECE R16	All M & N	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Rear underrun	ECE R58	Goods vehicles over 3500kg GVM	Unknown
Speedometer	ECE R39	All	EU, Australia, China, Japan, USA
Audible warning	ECE R28	All	EU, Australia, China, Japan, USA
Warning triangle	ECE R27	All	EU, Australia, China, Korea, Brazil
Frontal collision	ECE R94	M1	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA
Lateral collision	ECE R95	M1	EU, Australia, China, Japan, USA
Tilt angle	28 Degrees (R107)	More than 22 passengers	EU, Australia, RSA
Superstructure	ECE R66	More than 22 passengers	EU

*The term “functionally equivalent” is intended to convey the interpretation that those options in Table 2 which are not identical in technical content to a UN Regulation nevertheless achieve what is considered to be adequate safety performance by the regulatory authority that developed them. For example, FMVSS 121 is considered to be functionally equivalent to UN Regulation 13. Both have standards of braking performance and of safety back-up systems considered to be acceptable by regulatory authorities with many years of experience.

** These standards/Regulations are UN ECE Regulation Nos 13, 13H, 14, 16, 17, 27, 30, 43, 46, 48, 54, 58, 66, 69, 70, 79, 94, and 95,104. The levels specified in Column 5 are freely available on request. Later levels are freely available from the UN ECE Website - <https://www.unece.org/trans/main/welcwp29.html> then click on [UN Regulations \(1958 Agreement\)](#) then [Regulations \(Addenda to the 1958 Agreement\)](#) then select the number of the regulation required from the groups shown.

Table 3: National standards acceptable as equivalent to the UN ECE Regulations listed in Table 1 above

Subject	UN ECE Regulation or TTP Standard	Categories of vehicles affected	Standards of other nations which are understood to be directly equivalent to UN ECE or which are based on similar requirements
Braking	ECE R13H	M1, N1	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
	ECE R13	M2/M3, N2/N3	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Lighting	ECE R48	All	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Contour tape	ECE R104	M2/M3, N2/N3 + Goods over 7m	EU, Australia, China, Korea, Brazil, Gulf States
Chevrons	Roadworthiness Part 1 Annex 2, or SANS 1329*4	Over 3500kg GVM	EU Long or Slow Markings for Heavy Vehicles
Safety glass	ECE R43	All	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Rear view	ECE R46	All	EU, Australia, Japan, USA
Tyres - passenger	ECE R30	Passenger	EU, Australia, China, Japan, USA
Tyres commercial	ECE R54	Passenger & Goods	EU, Australia, China, USA
Emissions– Light v.	Euro 2	Passenger & Goods	EU, Australia, China, Japan, USA
Emissions - HCV	Euro 2	Passenger & Goods	EU, Australia, China, Japan, USA
Safety belts -	ECE R16	All	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA, India, RSA
Rear underrun	ECE R58	Goods vehicles over 3500kg GVM	Unknown
Speedometer	ECE R39	All	EU, Australia, China, Japan, USA
Audible warning	ECE R28	All	EU, Australia, China, Japan, USA

Subject	UN ECE Regulation or TTP Standard	Categories of vehicles affected	Standards of other nations which are understood to be directly equivalent to UN ECE or which are based on similar requirements
Warning triangle	ECE R27	All	EU, Australia, China, Korea, Brazil
Frontal collision	ECE R94	M1	EU, Australia, China, Japan, Korea, Brazil, Gulf States, USA
Lateral collision	ECE R95	M1	EU, Australia, China, Japan, USA
Tilt angle	28 Degrees (R107)	10 or more seats	EU, Australia, RSA
Superstructure	ECE R66	10 or more seats	EU

6 Individual countries are requested to respond by completing Table 3 below to provide their views on when the requirements listed in Table 3 below should be applied to vehicles entering into service.

The following Table 4 should be completed by interested parties to respond to the secretariat

Table 4: Individual Countries to please provide their views on when requirements should be made applicable to vehicles entering into service

		1)	2)	3)
Section No	Requirement	Should this be applicable immediately?	Or should it be applicable only from 2021 ?	Or should this never be applicable?
3.2	Additional measures to minimise fraud – (still to be developed)			
3.4	Roadworthiness certificate to be carried on vehicle**			
5.2	Information display on data plates – Whether both technically &			

		1)	2)	3)
Section No	Requirement	Should this be applicable immediately?	Or should it be applicable only from 2021 ?	Or should this never be applicable?
	legally permissible masses? ****			
5.3.7	Parking brakes on trailers			
5.3.7 c)	Overrun & service brakes on trailers required and to operate on all wheels ****			
5.3.8	Whether ABS and/or ESC is required - date of entry into service			
5.3.9 o)	Spring brake wind-off tool required to be carried**			
5.4.1	Use of decelerometer road test or brake roller tester**			
5.5.5	Chevrons and contour marking tape****			
5.5.6	Lighting is assumed to be positioned correctly by manufacturer**			
5.6	Can demarcated areas be made available to check rearview? **			
5.17	There is some advice on size and			

		1)	2)	3)
Section No	Requirement	Should this be applicable immediately?	Or should it be applicable only from 2021 ?	Or should this never be applicable?
	strength of securing bolts			
5.18	Should inertia belts be required on outboard seats?			
5.19	Wheel flaps/Mud flaps required ****			
5.20	Rear underrun required ****			
5.23	Oil leak rate			
5.25	Dimensions – Which vehicle dimensions to require? (R/wy test)**			
5.27	There are no emission limits in this specification – Cat converters believed to last only 8 years			
6.2 g)	Tyres marked “Not for highway use” = such vehicles prohibited			
7.1	Number of emergency exits & size of emergency exit windows**			
7.2	Dimensions for persons, gangways, seats; guard behind driver?**			

		1)	2)	3)
Section No	Requirement	Should this be applicable immediately?	Or should it be applicable only from 2021 ?	Or should this never be applicable?
The following are the direct references to UN ECE Regulations in order to upgrade vehicle safety design requirements for vehicles entering into service as from a date to be gazetted. (See 5.3 b). Compliance to equivalent national regulations are permitted as alternatives to the UN ECE Regulations.				
8.1	Lighting photometrics & positions & numbers (5.5) – ECE R48			
8.2	Rear underrun (5.20) – ECE R58			
8.3	Safety belts (5.18) – ECE R16			
8.4	Chevrons – (5.5.5) SANS 1329 – ECE R69, 70 – For quality			
8.5	Reflective tape – ECE R101 - (5.5.5) to ensure proper spec			
8.6	Warning triangle – ECE R27 - (N/A) to ensure high quality			
8.7	Glass – ECE R43 - (5.6)			
8.8	Mirrors – ECE R46 – (5.6)			
8.9	Braking – ECE R13 & R13H – (5.3)			

		1)	2)	3)
Section No	Requirement	Should this be applicable immediately?	Or should it be applicable only from 2021 ?	Or should this never be applicable?
8.10	Safety belt anchorages – ECE R14 – (visual assessment not possible)			
8.11	Seats – ECE R17 -- (visual assessment not possible)			
8.12	Tyres – ECE R30 & R54 – (5.10)			
8.13	Frontal collision – ECE R94 < 2500kg - – (visual assessment not possible)			
8.14	Side impact – ECE R95 – M1 & N1 R-point height < 700mm -- (visual assessment not possible)			
Not yet	Tilt angle? – Bus should tilt to 28 degrees without falling over – (visual assessment not possible)			
Not yet	Strength of superstructure – needed for Bus Safety – referred to as “rollover protection” - (visual assessment not possible)			

****** Signifies this requirement is already included in the text of Part 1 to take effect on all vehicles in service as from date to be gazetted. (See 5.3 (1)).

******** Signifies this requirement is already in the text of Part 1 for application to all vehicles entering into service as from -a date to be gazetted.