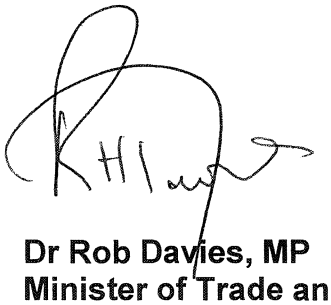
No. 836 **31 October 2014**

NATIONAL REGULATOR FOR COMPULSORY SPECIFICATIONS ACT (Act 5 of 2008)

PROPOSED AMENDMENT TO THE COMPULSORY SPECIFICATION MOTOR VEHICLES OF CATEGORY M2/3 (VC8023)

It is hereby made known under section 13(4) of the National Regulator for Compulsory Specifications Act, (Act 5 of 2008), that I, Dr Rob Davies the Minister of Trade and Industry, intends to amend the compulsory specification for Motor Vehicles of Category M2/3, as set out in the attached Schedule.

Any person who wishes to comment on the intention to thus amend the Compulsory Specification concerned, shall submit their comments, in writing, to the Chief Executive Officer, National Regulator for Compulsory Specifications, Private Bag X25, Brooklyn, 0075, on or before the date two (2) months after the publication of this notice.



Dr Rob Davies, MP
Minister of Trade and Industry

SCHEDULE

COMPULSORY SPECIFICATION FOR MOTOR VEHICLES OF CATEGORIES M_2 AND M_3

1 Scope

1.1 This specification covers the requirements for motor vehicle models of category M_2 and M_3, and minibuses, not previously registered or licensed in South Africa, designed or adapted for operation on a public road.

NOTE Except where stated otherwise, a semi-trailer bus should comply with all the requirements of this specification, and, in addition, with any compulsory requirements for the category O or N portions of the combination not covered by this specification.

1.2 The requirements of this specification shall, in so far as the parts already incorporated are concerned, apply in respect of an incomplete motor vehicle model supplied for further manufacture by one manufacturer to another, and the entire specification shall apply to the vehicle after completion thereof by the last-mentioned manufacturer.

1.3 This specification does not apply to experimental or to prototype vehicles constructed or imported by the original manufacturers or importers for the purpose of testing, assessment or development.

1.4 The relevant requirements of this specification shall take effect on the dates as specified in schedule 1

1.5 Where a South African national standard, including an international standard or a UN ECE regulation adopted by South Africa as a national standard, is incorporated by reference into this specification, only the technical requirements/specification for the commodity and the tests to verify the compliance, apply.

2 Definitions

For the purposes of this specification, the following definitions apply:

2.1
builder
person who builds a category M2 or M3 motor vehicle, and "build" has a corresponding meaning

2.2
bus
category M_2 or M_3 motor vehicle that is designed or adapted for the conveyance of passengers or of both passengers and goods

2.3
bus-train
category M_2 or M_3 motor vehicle that is designed or adapted for the conveyance of passengers or of both passengers and goods, that consists of two sections connected to form one unit that can swivel universally at the connection between such sections, and that has a continuous passageway over the entire passenger-carrying section of the vehicle

2.4
category M_2 motor vehicle, hereinafter referred to as a vehicle
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 not exceeding 5 t

2.5
category M_3 motor vehicle, hereinafter referred to as a vehicle
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 5 t

2.6
class I vehicle (urban bus excluding a minibus)
category M_2 or M_3 vehicle that is designed and equipped for urban and suburban transport, and that has, in addition to seating, provision and space for standing passengers, so arranged as to allow for passenger movement associated with frequent stops

2.7
class II vehicle (inter-urban bus excluding a minibus)
category M_2 or M_3 vehicle that is designed and equipped for inter-urban transport, and that has no spaces specifically intended for standing passengers; however, over short distances, it can provide for standing passengers in the passageway only

2.8
class III vehicle (touring bus excluding a minibus)
category M_2 or M_3 vehicle that is designed and equipped for touring or for long-distance journeys and that does not provide for the carriage of any standing passengers.

2.9
homologation
a process of establishing compliance of a model of motor vehicle and approval being granted by the regulatory authority, prior to it being introduced for sale.

2.10
importer
person who imports a category M2 or M3 motor vehicle, and “import” has a corresponding meaning

2.11
manufacturer
person who manufactures, produces, assembles, alters, modifies, adapts or converts a category M_2 or M_3 motor vehicle, and "manufacture" has a corresponding meaning

2.12
minibus
motor vehicle that is designed or modified solely for the conveyance of not more than 15 seated passengers in addition to the driver of the vehicle and that does not provide for the carriage of standing passengers

2.13
model
manufacturer's description for a series of vehicle designs that do not differ in respect of body shell, cab structure, profile, or the number of axles, by which they are introduced to South Africa, by a specific source

The Regulatory Authority reserves the right to decide which variations or combinations of variations constitute a new model and might also take cognizance of the classification system applied in the country of the design

The following variations do not necessarily constitute a new model:

a)a variant of the model in relation to trim or optional features for which compliance has been fully demonstrated;

b) different engine and transmission combinations, including petrol and diesel engines, and manual

and automatic transmissions;

c) minor variations in profile, such as front air dams or rear spoilers;

d) air management systems;

e) a different number of doors;

f) sleeper cabs on trucks;

g) wheelbase variations;

h) a cargo body or equipment that are fitted to a truck and that has no effect on compliance; and

i) the number of driven axles.

If a vehicle is manufactured in a number of configurations, such as a sedan, a hatchback, or a station wagon, and a single or double cab, each of these may be regarded as a variant to the base model.

2.14
proof of compliance
authentic evidence of compliance with any of the requirements of this compulsory specification from a source defined in "Source of Evidence" in Annexure A

2.15
public road
road, street or thoroughfare, including the verges, or any other place, whether a thoroughfare or not, to which the public or sections of the public have the right of access and that they commonly use

2.16
regulatory authority
an organisation appointed by the Minister of the Department of Trade and Industry to administer this compulsory specification on behalf of the South African Government.

2.17
registered manufacturer, importer or builder
any manufacturer, importer or builder required to be registered in terms of regulation 38 of the National Road Traffic Act 93/1996

2.18
semi-trailer bus
category O semi-trailer that is intended to be drawn by a category N truck tractor, the combination of which is designed or adapted for the conveyance of a driver and more than eight passengers. (See also 3.3.)

2.19
windscreen
any window at the front end of a vehicle that affords forward vision to the driver or to the passengers

3 General requirements

3.1 Requirements for lights, lighting equipment and rear warning signs

3.1.1 Lights

Main and dipped-beam headlights, direction-indicator lights, stoplights, and front and rear position lights fitted to a vehicle shall comply with the relevant requirements given in SANS 1376-1:1983, *Lights for motor vehicles – Part 1: Incandescent lamps*, as published by Government Notice no.

563of 29 July 1983, SANS 1376-2:1985, *Lights for motor vehicles – Part 2: Headlights*, as published by Government Notice no. 1263 of 14 June 1985, and SANS 1376-3:1985, *Lights for motor vehicles – Part 3: Secondary lights*, as published by Government Notice no. 2328 of 18 October 1985:

3.1.2 Lighting

Lighting shall be fitted to a vehicle and shall comply with the relevant requirements given in SANS 1046:1990, *Motor vehicle safety specification for lights and light-signalling devices installed on motor vehicles and trailers*, as published by Government Notice no. 1735 of 27 July 1990:

Provided that:

a) the requirements for the installation of retro-reflectors as given in 4.14, 4.16 and 4.17 of the said SANS 1046 may be met by the use and fitting of retro-reflectors that are defined in the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996), and, in addition, the requirements may also be met by the use and fitting of retro-reflectors that are integral portions of any other light lens assembly; and

b) the specific requirements of the said SANS 1046 for

1) dipped-beam adjustment devices, as set out in 4.2.6 and appendix 1;

2) end-outline marker lamps, as set out in 4.13; and

3) rear fog lamps, as set out in 4.11,

shall be treated as **OPTIONAL** for the purposes of this compulsory specification:

Provided that, if any motor vehicle is fitted with such devices or lamps, they shall comply with the applicable requirements.

3.1.3 Rear warning sign (chevron)

A vehicle of gross vehicle mass (GVM) exceeding 3 500 kg shall be fitted with a rear warning sign that complies with the requirements of the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996).

3.2 Requirements for rear-view mirrors and vision

3.2.1 Rear-view mirrors

Rear-view mirrors shall be fitted to a vehicle and shall comply with the relevant requirements given in SANS 1436:1989, *Motor vehicle safety specification for the rear-view mirrors of motor vehicles of categories M and N,* as published by Government Notice no. 2008 of 22 September 1989.

3.2.2 Windscreens, windows and partitions

3.2.2.1 Windscreens

3.2.2.1.1 A windscreen shall be fitted to a vehicle and shall be of safety glass that complies with the relevant requirements given in SANS 1191:1978, *High penetration-resistant laminated safety glass for vehicles*, as published by Government Notice no. 463 of 9 July 1982.

3.2.2.1.2 For the purpose of this specification, the marking requirements shall be as follows:

a) the windscreen shall bear the glass manufacturer's registered trademark; and

b) the glass fitted shall comply with an approved national standard, recognized by the Regulatory Authority, that will provide a method of identifying the glass type.

3.2.2.2 Windows and partitions

3.2.2.2.1 Glass partitions and glass windows fitted to a vehicle shall be of safety glass that complies with the relevant requirements given in the said SANS 1191, or in SANS 1193: 1978, *Toughened safety glass for vehicles,* as published by Government Notice no. 463 of 9 July 1982

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3.2.2.2.2 For the purpose of this specification, the marking requirements shall be as follows:

a) the glass shall bear the glass manufacturer's registered trademark; and

b) the glass fitted shall comply with an approved national standard, recognized by the Regulatory Authority, that will provide a method of identifying the glass type.

3.2.2.2.3 Excluding those windows fitted to the immediate right and to the immediate left of the driver, which shall be as in 3.2.2.2.1 above, windows and partitions of a plastics material shall comply with the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996)..

3.2.3 Windscreen wipers

With the exception of semi-trailer buses, and where there is a central full sweep windscreen wiper, a vehicle shall be fitted with windscreen wipers on both the driver's side and the passenger side of the vehicle windscreen, that are capable of operation by means other than manual, and the windscreen wiper blade, when in operation, shall wipe the outside of the windscreen directly in front of the driver, evenly and efficiently.

3.3 Requirements for brakes and braking equipment

3.3.1 Vehicles homologated on or after 1 January 2001, and vehicles manufactured or imported on or after 1 January 2010 and which were homologated before 1 January 2001 to SABS 1207:1985, shall be fitted with braking equipment and shall comply with the relevant requirements given SABS ECE R13, Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking, to the level of ECE R13/08.

3.3.1.1 For the purposes of this Compulsory Specification, the following requirements of SABS ECE R13/08 are excluded:

a) the fitment of automatic brake adjustment devices;
b) the compulsory fitment of anti-lock braking systems; and
c) anti-lock specific brake test procedure and its requirements (paragraph 5 of annex 13 of SABS ECE R13/08).

3.3.1.2 For vehicles fitted with anti-lock braking systems, the braking equipment shall, in terms of braking performance, at least comply with the braking performance requirements for the vehicles with non anti-lock braking systems fitted.

3.3.2 Vehicles manufactured or imported on or after 1 January 2015 shall be fitted with braking equipment including anti-lock braking systems and shall comply with the relevant requirements given SABS ECE R13, Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking, to the level of ECE R13/08, provided that:

a) compliance of the anti-lock braking system is not required until 01 January 2017,
b) anti-lock braking systems are not required on all-wheel-drive vehicles or on vehicles with articulated steering, and
c) compliance to clause 4.4 of Annex 10 of SABS ECE R13/08 is not required to be demonstrated.

3.3.3 For the purpose of this Compulsory Specification paragraph 2.3.6 of Annex 4 of SABS ECE R13/08 is amended to read as follows:

To check compliance with the requirements specified in paragraph 5.2.1.2.4 of SABS ECE R13, a Type-O test shall be carried out with the engine disconnected at an initial test speed of 30km/h. The mean fully developed deceleration on application of the control of the parking brake system and the deceleration immediately before the vehicle stops shall not be less than 1,5m/s2. The test shall be

carried out with a laden vehicle. The force exerted on the braking control device shall not exceed the specified values.

3.4 Requirements for controls, steering mechanism and audible warning devices

3.4.1 Controls

All controls that are fitted to a vehicle, and that are required for the operation of the vehicle, shall be so located that the driver can reach and operate them when he is seated in the normal driving position, with the seat belt fastened, if fitted.

3.4.2 Steering mechanism

A vehicle shall be of a right-hand drive configuration.

3.4.3 Audible warning devices

A vehicle shall be fitted with one or more audible warning devices such that, when they are operated, a continuous sound is emitted at a level of at least 93 dB, determined in accordance with SANS 0169:1984, *Determining the performance of audible warning devices (hooters) after installation in a motor vehicle*, as published by Government notice no. 966 of 11 May 1984

3.5 Requirements for doors, entrances and exits

The doors, entrances and exits of any category M_2 or M_3 motor vehicle shall comply with the requirements of the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996).

3.6 Requirements for seats, seat anchorages, restraining device anchorages and restraining devices (safety belts)

3.6.1 Seats and seat anchorages

3.6.1.1 Excluding a minibus, a vehicle shall be fitted with seats and seat anchorages that comply with the relevant requirements given in SANS 1564:1992, *The strength of seats (and their anchorages) of large passenger buses*, as published by Government Notice no.216 of 19 February 1993.

3.6.1.2 Excluding seating that is of the folding tip-up (jockey), rearward-facing or sideways-facing type, a minibus shall be fitted with seats and seat anchorages that comply with the relevant requirements given in SANS 1429:1987, *Motor vehicle safety specification for strength of seats and their anchorages*, as published by Government Notice no.1878 of 4 September 1987

3.6.2 Restraining device anchorages

Excluding seating positions that have seats of the folding tip-up (jockey), rearward-facing or sideways-facing type, and seating positions in the rear rows of seats on simple single-box type construction vehicles that contain at least three rows of seats, all seating positions on a vehicle that requires to have restraining devices fitted, shall have restraining device anchorages that comply with the relevant requirements given in SANS 1430: 1987, *Motor vehicle safety specification for anchorages for restraining devices in motor vehicles*, as published by Government Notice no. 1878 of 4 September 1987, and, except that for vehicles of category M_3, the indicated test loads shall be supplemented by 6,6 times the mass of the complete seat:

Provided that front central seating positions need only be fitted with two lower restraining device anchorages.

3.6.3 Restraining devices (safety belts)

Subject to the proviso that no restraining devices (safety belts), excluding those given in (c) below, are required to be fitted to any vehicle of GVM exceeding 3,5 t, the following requirements shall apply:

a) the restraining devices (safety belts) that are fitted to a vehicle shall comply with the relevant requirements given in SANS 1080: 1983, *Restraining devices (safety belts) for occupants of adult build in motor vehicles (Revised requirements)*, as published by Government Notice no. 264 of 17 February 1984.

b) the type and location of the restraining devices (safety belts) required to be fitted to a vehicle and the method of installation thereof shall comply with the relevant requirements given in SANS 0168:1983, *The installation of restraining devices (safety belts) in motor vehicles*, as published by Government Notice no. 265 of 17 February 1984, except that the same exclusions for seating positions shall apply as in 3.6.2; and

c) in the case of class III vehicles, non-protected seats (see 4.3.3 of the said SANS 1430), the details of which are specified in 3.6.2 above, shall be fitted with at least a restraining device of the lap belt type.

3.7 Requirements for electrical connectors

Electrical connectors that are fitted for the purpose of towing a vehicle, shall comply with

a) in the case of 12 V systems:
   1) SANS 1327:1981, Electrical connectors for towing and towed vehicles (7-pole connectors),or

   2) SANS ISO 11446:1993, *Passenger cars and light commercial vehicles with 12 V systems – 13-pole connectors between towing vehicles and trailers – Dimensions and contact allocation*, or

b) in the case of 24 V systems:
   1) SANS 1327: 1981, Electrical connectors for towing and towed vehicles (7-pole connectors),or

   2) SANS ISO 12098: 1994, *Commercial vehicles with 24 V systems – 15-pole connectors between towing vehicles and trailers – Dimensions and contact allocation*.

3.8 Requirements for warning triangles

In the case of any vehicle of GVM exceeding 3,5 t that is supplied with warning triangles as part of the vehicle equipment, such warning triangles shall comply with the requirements given in SANS 1329-1:1987, *Retro-reflective and fluorescent warning signs for road vehicles – Part 1: Triangles*, as published by Government Notice no. 2227 of 9 October 1987.

3.9 Requirements for load distribution between axles and loading conditions

3.9.1 The load distribution of a stationary vehicle on level ground shall be determined in two conditions:

a) unladen kerb mass, as specified in 3.9.3; and

b) laden, as specified in 3.9.4.

3.9.2 The front axle or axles shall carry not less than the percentage of the load mass shown in table 1 below:

Table 1 — Minimum percentage of load mass on front axle(s)

1	2	3	4	5	6	7
Loading conditions	**Class I vehicle**		**Class II vehicle**		**Class III vehicle**	
	Rigid	**Articulated**	**Rigid**	**Articulated**	**Rigid**	**Articulated**
Unladen	20 %	20 %	25 %	20 %	25 %	20 %
Laden	25 %	20 %	25 %	20 %	25 %	20 %

3.9.3 Unladen, means the vehicle in running order, unoccupied and unladen but complete with fuel, coolant, lubricant, tools and spare wheel, with the addition of 63 kg for the mass of the driver and 63 kg for the mass of the crew if there is a crew seat.

3.9.4 Laden, means the vehicle unladen as described in 3.9.3 with the addition of a mass *Q* on each passenger seat, a number, corresponding to the authorized number of standing passengers, of masses *Q* uniformly distributed over the area S_1, plus a mass equal to *B*, uniformly distributed in the baggage compartments plus, where appropriate, a mass equal to *BX* uniformly distributed over the surface area of the roof equipped for the carriage of baggage.

3.9.5 The values of *Q* for the different classes of vehicle are specified in table 2 below.

Table 2 — Values of *Q*, S_{sp}, *L* and *R*

1	2	3	4	5
Vehicle class	***Q***	S_{sp}	***L***	***R***
I	68	0,125	100	75
II	68	0,150	100	75
III	68	No standing passengers	100	75

3.9.6 *B*, in kilograms, shall have a numerical value not less than 100 × *V* (where *V* is the total volume of the luggage compartment, in cubic metres).

3.9.7 *BX* shall exert a pressure of not less than 75 kg/m^2 over the surface area of the roof equipped for the carriage of baggage.

3.10 Requirements for area available for passengers

3.10.1 The total surface area S_o available for passengers is calculated by deducting from the total area of the floor of the vehicle

a) the area of the driver's compartment,

b) the area of steps at doors and any step of depth less than 30 cm,

c) the area of any part over which the vertical clearance is less than 135 cm measured from the floor, and

d) the area of any part of the articulated section(s) of an articulated bus or coach to which part access is prevented by handrails and partitions.

3.10.2 The surface area S_1 available for standing passengers (only in the case of vehicles of class I and class II, in which the carriage of standing passengers is allowed) is calculated by deducting from S_o

a) in the case of vehicles of class I and class II:

1) the area of all parts of the floor the slope of which exceeds 8 %;

2) the area of all parts of the floor that are not accessible to a standing passenger when all the seats are occupied;

3) the area of all parts of the floor where the clear height above the floor is less than 190 cm or, in the case of the section of the gangway situated above and behind the rear axle, and the attaching parts thereof, less than 180 cm (hand-holds shall not be taken into account in this connection);

4) the area of the floor forward of a vertical plane that passes through the centre of the seating surface of the driver's seat (in its rearmost position) and through the centre of the exterior rear-view mirror mounted on the opposite side of the vehicle;

5) the area of the floor 30 cm in front of any seat;

6) any part of the surface of the floor (e.g. a corner or edge) on which it is not possible to place any part of a rectangle of 400 mm × 300 mm;

7) any area of the floor that is not capable of circumscribing a rectangle of 400 mm × 300 mm; and

b) in the case of vehicles of class II, the area of all parts that are not part of a gangway.

3.11 Requirements for number of passengers accommodated

3.11.1 There shall be on the vehicle a number P_s of seating places, other than folding seats. If the vehicle is of class I or class II, the number P_s shall be at least equal to the number of square metres of floor area available for passengers and crew (if any), rounded down to the nearest whole number.

3.11.2 The total number *N* of seating and standing places in vehicles shall be calculated such that both of the following conditions are fulfilled:

$N \leq Ps + (S1 \div Ssp)$

and

$N \leq (MT - MV - (L \times V) - (R \times VX))$

where

P_s is the number of seating places;

S_1 is the surface area, in square metres, available for standing passengers;

S_{sp} is the area assumed for one standing passenger, in square metres per standing passenger;

MT is the technically permissible maximum mass, in kilograms;

MV is the unladen mass, in kilograms;

L is the specific load of baggage, in kilograms per cubic metre, in the baggage compartment(s);

V is the total volume, in cubic metres, of the baggage compartments;

R is the specific mass of baggage on the roof area, in kilograms per square metre;

VX is the total surface area, in square metres, available for baggage to be carried on the roof;

Q is the mass, in kilograms, assumed for the load on each passenger seating and standing place.

In the case of class III vehicles, $S_1 = 0$.

The values of Q, S_{sp}, L and R for every class of vehicle are as given in table 2.

3.11.3 If a vehicle of class II or class III is approved as a class I vehicle, the mass of baggage carried in the baggage compartment accessible only from outside the vehicle is not taken into account.

3.11.4 The calculated mass on each axle of the vehicle shall not exceed the values of their respective technically permissible maximum values.

4 Requirements for the control of environmental interference

4.1 Suppression of radio and television interference

A vehicle, its components and its accessories shall comply with the current applicable regulations relating to interference with communications, promulgated under the Telecommunication Act, 1996 (Act 103 of 1996).

4.2 Suppression of atmospheric pollution

4.2.1 The exhaust emission from the engine of a vehicle shall be such as to comply with the current applicable regulations promulgated under the Atmospheric Pollution Prevention Act, 1966 (Act 45 of 1965).

4.2.2 The gaseous and particulate emissions from the vehicle shall comply with the requirements of at least one of the following:

4.2.2.1 SANS 20049:2004 *Uniform provisions concerning the approval of compression-ignition (C.I.) and natural gas (NG) engines as well as positive-ignition (P.I.) engines fuelled with liquefied petroleum gas (LPG) and vehicles equipped with C.I. and NG engines and P.I .engines fuelled with LPG, with regard to the emissions of pollutants by the engine* to the level of ECE R49.02B. or

4.2.2.2 United States Regulations.

Engines which operate on diesel, liquefied petroleum gas, the technical requirements of USA Code of Federal Regulations, Part 86 -Control of air pollution from new and in-use motor vehicles and new and in-use motor vehicle engines certification and test procedures-Subpart A 40 CFR 86.098-11 Emissions standards for 1998 and later year diesel heavy-duty engines and vehicles; and Subpart N 40 CFR 86.1300 series-Emissions Regulations for new Otto-cycle and diesel heavy duty engines; gaseous and particulate exhaust test procedures, are deemed to be equivalent to the technical requirements of this standard.
Engines which operate on petrol, and which comply with the technical requirements of the USA Code of Federal Regulations, Part 86- Control of air pollution from new and in-use motor vehicles and new and in-use motor vehicle engines certification and test procedures – Subpart A 40 CFR 86.096-10 Emission standard for 1996 and the later model year Otto-cycle heavy-duty engines and vehicles; and Subpart N 40 CFR 86.1300 series – Emission Regulations for new Otto-cycle and diesel heavy-duty engines; gaseous and particulate exhaust test procedures, will be accepted as complying with this standard., or

4.2.2.3 Japanese Standards

The 1997 Japanese Exhaust Emission Standards for 'light-duty vehicles'and the 1998 Japanese Exhaust emission Standards for 'medium-duty vehicles', as detailed in the 'Safety Regulatios for Road Vehicles', Japanese Ministry of Transport Ordinance No. 67 of 28 July 1951, Article 31,as amended by Ordinance No. 4 of 19 January 1996. The Japanese Exhaust Emission Standards for 'heavy-duty vehicles', as detailed in the 'Safety Regulations for Road Vehicles', Japanese Ministry

of Transport Ordinance No. 67 of 28 July 1951, Article 31, as amended by Ordinance No. 22 of 31 March 1997.
Note; For vehicles certified to Japanese requirements the following definitions apply: Light-duty vehicles: vehicles with GVW over 2.5t and not more than 3.5t. Medium-duty vehicles: vehicles with a GVW over 3.5t and not more than 12t. Heavy-duty vehicles: vehicles with a GVW of over 12t., or

4.2.2.4 Australian Design Rules.

Australian Design Rule ADR 80/00, Emission Control for Heavy Vehicles, or

4.2.2.5 SANS 20083 *Uniform provisions concerning the approval of vehicle with regard to the emissions of pollutants according to engine fuel requirements* to the level of ECE R83.04.

4.3 Suppression of noise emission

4.3.1 Vehicles in motion

With the exception of noise emission that originates from audible warning devices, any noise emitted by a vehicle, when determined in accordance with SANS 0205:1986, *The measurement of noise emitted by motor vehicles in motion*, as published by Government Notice no.936 of 16 May 1986, shall not exceed:

a) 84 dB(A), in the case of a category M_2 vehicle that has a gross vehicle mass not exceeding 3,5 t,

b) 89 dB(A), in the case of a category M_2 vehicle that has a gross vehicle mass exceeding 3,5 t and in the case of category M_2 and M_3 vehicles that have power units rated at less than 150 kW, and

c) 91 dB(A), in the case of all other category M_2 and M_3 vehicles.

To allow for any lack of precision in the measuring equipment, the highest sound level reading obtained shall be reduced by 1 dB(A).

4.3.2 Vehicles when stationary

With the exception of noise emission originating from audible warning devices, any noise emitted by a vehicle, when determined in accordance with SANS 0181:1981, *The measurement of noise emitted by road vehicles when stationary*, as published by Government Notice no. 463 of 9 July 1982, and SANS 0281:1994, *Engine speed (S values), reference sound levels and permissible sound levels of stationary road vehicles*, as published by Government Notice no.1313 of 25 August 1995, and shall be recorded for homologation purposes.

4.3.3 Environmental noise regulations for workplace

In the case of any vehicle that is manufactured with the clear intention of its becoming a workplace, the interior of the vehicle shall comply with the applicable noise regulations promulgated under the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

5 Requirements concerning metrological data

5.1 Vehicle dimensions

The dimensions of a vehicle shall comply with the applicable requirements of the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996).

5.2 Information plates

5.2.1 Data plates

5.2.1.1 A vehicle shall have a metal data plate or plates affixed by rivets, or by welding, or by any other method that will achieve permanency of attachment during the life of the vehicle, in a conspicuous and readily accessible position on a part not subject to replacement.

5.2.1.2 As an alternative to the above, a data plate may be a self-adhesive tamperproof metal or plastics label that is not transferable from one vehicle to another, is clearly legible, and undergoes permanent and obvious damage on removal. The self-adhesive tamperproof label shall be resistant to engine oils, to engine coolants, to normal engine temperatures and to humidity. In addition, it shall have permanency characteristics similar to those of the plate(s) described in 5.2.1.1.

5.2.2 Manufacturer's mass and power data

5.2.2.1 Information on data plate

The data plates required in terms of 5.2.1 shall be legibly and permanently imprinted or stamped with the following information concerning the vehicle:

a) the gross vehicle mass, in kilograms, for the model type, denoted and prefixed by the letters GVM/BVM;

b) the gross combination mass, in kilograms, for the model type, denoted and prefixed by the letters GCM/BKM;

c) the gross axle mass-load of each axle, or gross axle unit mass-load of each axle unit, in kilograms, for the model type, denoted and prefixed by the letters GA/BA or GAU/BAE, as applicable;

d) the net power, in kilowatts, for the model type, denoted and prefixed by the letters P/D, determined in accordance with SANS 013-1:1988, *The determination of performance (at net power) of internal combustion engines – Part 1: Road vehicle internal combustion engines at sea level*; as published by Government Notice no.1652 of 19 August 1988, and

e) in the case of a semi-trailer bus, the gross kingpin mass-load as specified by the manufacturer, in kilograms, for the model type, denoted and prefixed by the letters GKM/BSM.

5.2.2.2 Optional data plate

The abbreviations given in 5.2.2.1(a), 5.2.2.1(b) and 5.2.2.1(c) are not required if the information is supplied in the following order:

a) gross vehicle mass;

b) gross combination mass; and

c) gross axle mass-load, in the order front to rear.

5.2.3 Information on vehicle engine

The requirements for the vehicle engine number shall comply with the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996).

5.2.4 Provision for registration

Suitable spaces shall be provided on the data plate(s) for the following:

a) T . . . kg (for the tare);

b) V . . . kg (for the permissible maximum vehicle mass);

c) A . . . kg or AU/AE . . . kg, as applicable (for the permissible axle mass-load of each axle or the permissible axle unit mass-load of each axle unit); and

d) D/T . . . kg (for the permissible maximum drawing vehicle mass).

The responsibility for marking this information on the data plate(s) shall rest with the final vehicle manufacturer.

5.2.5 Vehicle identification number (VIN)

The vehicle identification number shall comply with the relevant requirements given in SANS ISO 3779:1983, *Road vehicles – Vehicle identification number (VIN) – Content and structure,* and SANS ISO 4030:1983, *Road vehicles – Vehicle identification number (VIN) – Location and attachment*, as published by Government Notice no.3160 of 20 November 1992. However, the requirements for marking the VIN, as given in clause 5 of the said SANS ISO 4030, shall, for the purpose of this compulsory specification, be taken to read as follows:

5 VIN attachment

5.1 The VIN shall be marked direct on any integral part of the vehicle; it may be either on the frame, or, for integral framebody units, on a part of the body not easily removed or replaced.

5.2 The VIN shall also be marked on the data plate.

5.3 Deleted.

5.4 The height of the roman letters and the arabic numerals of the VIN shall be as follows:

– at least 7 mm if marked in accordance with 5.1 (frame, body, etc.) on motor vehicles and trailers; and

– at least 3 mm when marked in accordance with 5.2 (data plate).

5.2.6 Visible identification

An identification code made up of all or part of the VIN shall be applied to a minibus, such that it is readily visible to a person standing outside the vehicle, without the use of aids.

In cases where only part of the VIN is used, the code shall be sufficient to provide unique identification of any unit of a model, provided the model is known.

5.3 Measuring units

All gauges, indicators or instruments that are fitted to a motor vehicle and are calibrated in physical units shall be calibrated in units as prescribed by the current applicable regulations promulgated under the Measuring Units and National Measuring Standards Act, 1973 (Act 76 of 1973).

6 Requirements for vehicle structure, equipment, components and systems

6.1 Superstructure (roll-over protection)

The superstructure of a single-decked vehicle, excluding a minibus, shall comply with the relevant requirements given in SANS 1563:1992, *The strength of large passenger vehicle superstructures (roll-over protection),* as published by Government Notice no. 216 of 19 February 1993.

6.2 Tilt angle

A vehicle, excluding a minibus, shall not overturn when it is tilted to either side at an angle of up to 23° from the upright position.

The conditions of vehicle loading for the tilt test shall comply with the requirements of the relevant regulations of the National Road Traffic Act, 1996 (Act 93 of 1996).

6.3 Speedometers

A vehicle, excluding a semi-trailer bus, that is capable of exceeding a speed of 25 km/h on a level road, shall be equipped with speedometer equipment that complies with the relevant requirements given in SANS 1441:1987, *Motor vehicle safety specification for speedometer equipment on motor vehicles*, as published by Government Notice no. 1878 of 4 September 1987.

Provided that any speed recording device fitted as speedometer equipment shall be exempted from the requirements of the said SANS 1441.

6.4 Engine, exhaust system and transmission

6.4.1 Engine

The engine of a vehicle shall be fitted with a cover such that any part of the engine that constitutes a source of danger is out of normal reach of a person.

6.4.2 Exhaust system

The exhaust system of a vehicle shall comply with the requirements of the relevant regulations of the National Road Traffic Act (Act 93 of 1996)

6.4.3 Transmission

A self-propelled vehicle shall be equipped with a transmission that enables it to be controlled and driven in both a forward and a reverse direction.

6.5 Fuel system

The orifice for filling a fuel tank on a vehicle shall be fitted with an effective cap that prevents incidental ingress of water or other foreign matter.

6.6 Tyres

The tyres fitted to the wheels of a motor vehicle shall comply with the relevant requirements of the compulsory specification for pneumatic tyres for commercial vehicles and their trailers as published in the relevant government gazette and the National Road Traffic Act, 1996 (Act 93 of 1996).

Provided that, if certain class I urban buses are designed and intended to be fitted with tyres that are specifically marked for "City Bus" use only, a clear indication that the maximum speed shall not exceed 60 km/h, shall be placarded, for the driver's information.

6.7 Wheel flaps

All category M_3 vehicles of gross vehicle mass exceeding 7,5 t shall be fitted with wheel flaps that comply with the relevant requirements given in SANS 1496:1989, *Wheel flaps fitted to motor vehicles*, as published by Government Notice no.2008 of 22 September 1989:
Provided that

a) wheel flaps that are designed and approved by the vehicle manufacturer may be fitted as an alternative, and

b) chassis-only vehicles and chassis-cab vehicles that are being driven to a place to have body work fitted or to a dealer of such vehicles are excluded from the fitment of wheel flaps.

7 Homologation requirements

7.1 Homologation

Registered manufacturers, importers and builders (MIBs) shall have each model of motor vehicle from a specific source, covered by the scope of this compulsory specification, successfully homologated by the regulatory authority in accordance with the requirements of Annexure A.

7.2 Rights of homologation approval

The rights of ownership of homologation approval, so granted for a vehicle model in 7.1, shall lie with the registered MIB that obtained such approval. This may only be transferable, to another registered MIB, on request of the MIB that currently owns the rights of homologation approval, and be authorised by the regulatory authority.
A transference fee, as determined by the Minister, shall be paid to the regulatory authority.

8 Equivalent requirements

The requirements of any of the national standards stated in the appropriate parts given in table1 shall be deemed to have been met if compliance with the equivalent standards given in columns 5, 6 or 7 of the same table, or to any of their later amendment levels is achieved.

Where an EEC Directive is quoted in column 5, and an amendment level is quoted in column 6, this shall mean that the Directive and its amendments up to, and including the quoted level (in column 6), is the minimum level that is acceptable.

Compulsory specification for motor Vehicles of category M_2 and M_3

Schedule 1 — Operative dates

1	2	3	4	5	6
Subsection	**Item**	**Operative date**	**Exclusions**	**Exclusion expiry date (Manufactured/ Imported)**	**Exclusion expiry date (Sale)**
3.1.1	Lights to SANS 1376	15 July 1987 1 January 1998	Vehicle models homologated before 15 July 1987 Rear registration plate lights, reversing lights, end-outline marker lights and parking lights fitted to vehicle models homologated before 1 January 1998	1 January 2001 1 January 2001	
3.1.2	Lighting to SANS 1046	1 February 1992	Fitment of category 5 indicators	1 January 2001	
3.3.1	Braking to SABS ECE R13 to the level of ECE R13.08 excluding 3.3.2 a), b) and c)	1 January 2001	Vehicle models homologated to SANS 1207 before 1 January 2001	1 January 2010	1 July 2011
3.3.2	Compulsory fitment of anti-lock brake systems to all vehicles manufactured or imported on or after 01 January 2015 to the level of SABS ECE R13.08, excluding clause 4.4 of Annex 10 of SABS ECE R13.08 and excluding 3.3.2a) compliance and documentation.	1 January 2015	All-wheel-drive vehicles. Vehicles with articulated steering	No expiry	No expiry
3.3.2	Compliance to the anti-lock specific brake test procedure, excluding clause 4.4 of Annex 10 of ECE R13.08.	1 January 2017	All-wheel-drive vehicles. Vehicles with articulated steering	No expiry	No expiry
3.6	Seats and seat anchorages to SANS 1564	3 April 1999	Vehicle models homologated before the operative date	1 January 2001	
4.2.2	Vehicle emissions to SANS 20049 to the level of ECE R49.02B, US EPA 1998, Japanese 1998, ADR 80/00, or SANS 20083 to the level ECE R83.04	1 January 2006	Vehicle models homologated before 1 January 2006	1 January 2010	1 July 2011
4.3.1	Suppression of noise emission to SANS 097	1 September 1984	Vehicles homologated before the operative date	1 January 2001	
4.3.1	Suppression of noise emission to SANS 0205	19 September 2002			
5.2.6	Visible identification	1 August 2001			
6.1	Superstructure (roll-over protection) to SANS 1563	5 April 1999	Minibuses	1 January 2001 for motor vehicles, other than minibuses	

Compulsory specification for motor vehicles of category M_2 and M_3

Table 1 — Equivalent standards that shall be deemed to comply with SA national standards

1	2	3	4	5	6	7	8	9
				Equivalent standards				
Sub clause	**Item**	**SANS No.**	**Dated**	**EEC**	**Min. amend. level**	**ECE**	**Others**	**Remarks**
3.1.1	Lights	1376-1 1376-2 1376-3	1983 1985 1985	76/757 76/758 76/759 76/760 76/761 76/762 77/538 77/539 77/540		R1 R2.02 R3.02 R4 R5.01 R6.01 R7.01 R8.04 R19.01 R20.02 R23 R31.01 R37.02 R38 R77		Applicable only for headlamps, direction indicators, stoplights, front and rear position lights
3.1.2	Installation of lights	1046	1990	76/756	89/278	R48		
3.1.3	Rear warning signs	Act	1989					
3.2.1	Rear-view mirrors	1436	1989	71/127	88/321	R46.01		
3.2.2.1	Windscreens	1191	1978	92/22		R43		
3.2.2.2	Windows and partitions	1191 or 1193	1978 1978	92/22 92/22		R43 R43		
3.3	Braking	SANS ECE R13 04 August 1999	1996			R 13.08		
3.4.3	Audible warning devices	0169	1984	70/388		R28.01		
3.6.1	Seats and seat anchorages	1564 or 1429	1992 1987	74/408	81/577	R80 R17.02		
3.8	Warning triangles	1329-1	1987			R27.03		If supplied
4.1	Radio interference	Act	1996	72/245		R10.01		
4.2	Atmospheric pollution	Act	1965	70/220 72/306		R15 R24 R83		
4.2.2.1	Vehicle emissions	SANS 20049	2004			R49.02 B		
4.3.1	Noise when in motion	0205	1986	70/157	80/334	R51		
4.3.2	Noise when stationary	0181 0281	1981 1994	70/157	84/424	R51		
5.2.1	Data plate(s)			76/114	78/507			
5.2.5	Vehicle identification number (VIN)	SANS ISO 3779 SANS ISO 4030	1983 1983					
6.1	Superstructure (roll-over protection)	1563	1992			R66		
6.3	Speedometers	1441	1987	75/443		R39		
6.6	Tyres	Act	1996			R54		

Annexure A

Administrative Process - Homologation of Models of Motor Vehicles of Category M2/M3.

1. The Applicant shall formally submit a request for homologation, for each model of motor vehicle intended to be manufactured or imported, in writing, to the Regulatory Authority providing information of his/her intention to homologate that model of motor vehicle.
2. The Regulatory Authority shall forward to the Applicant the relevant homologation application documents, for each model as requested in 1 above. The Applicant shall complete the application and forward it to the Regulatory Authority. The application documents shall stipulate the information to be submitted to the Regulatory Authority, and these shall accompany the submitted application. The appropriate fee, as determined from time to time by Notice in the Government Gazette, for the homologation, shall be paid to the Regulatory Authority.
3. Upon receipt of the completed application documents, the Regulatory Authority shall review the documents for correctness, completeness, and authenticity. Incorrect documentation, or insufficient documentation, will be reported to the applicant, for his/her correction.
4. Once the application documentation is correct, the Regulatory Authority shall formally confirm the date and place to the Applicant for the sample vehicle to be inspected as part of the homologation process (if not already submitted).
5. At the homologation inspection, the Regulatory Authority shall inspect the sample vehicle and verify it against all mandatory requirements and the submitted evidence of conformity in the application documents, to these requirements.
6. Any non-compliances identified in 5 above, shall be resolved by the Applicant, to the satisfaction of the Regulatory Authority.
7. Once the homologation process establishes that the vehicle model complies with all the relevant mandatory requirements of this specification, the Regulatory Authority shall issue a formal Letter of Compliance (Homologation Approval Letter), to the applicant.
8. The original application documents, and copies of supporting evidence of compliance documents, as necessary, shall be taken, and maintained as Homologation Records, by the Regulatory Authority.

Source of evidence

The evidence of compliance to any of the requirements of any referred-to standard in this compulsory specification, which requires testing to establish compliance, and a test report issuing, will only be recognized by the Regulatory Authority, from the following sources:

1) A laboratory that is part of an international or regional mutual acceptance scheme, or
2) A laboratory that is accredited to ISO/IEC 17025 by SANAS or an ILAC affiliated accreditation body, or
3) The laboratory has been successfully assessed against the requirements of ISO/IEC 17025 to the satisfaction of the Regulatory Authority.