Vehicle Standard (Australian Design Rule 65/00 – Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses) 2006

I, JAMES ERIC LLOYD, Minister for Local Government, Territories and Roads, determine this vehicle standard under subsection 7 (1) of the *Motor Vehicle Standards Act 1989*.

Dated 5 July 2006

[Signed]

James Eric Lloyd

Minister for Local Government, Territories and Roads

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0. LEGISLATIVE PROVISIONS

0.1. NAME OF STANDARD

0.1.1. This Standard is the Vehicle Standard (Australian Design Rule 65/00 – Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses) 2006.

0.1.2. This Standard may also be cited as Australian Design Rule 65/00 — Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses.

0.2. COMMENCEMENT

0.2.1. This Standard commences on the day after it is registered.

0.3. REPEAL

0.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 65/00 — Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses that is:

(a) made under section 7 of the Motor Vehicle Standards Act 1989; and

(b) in force at the commencement of this Standard.

0.3.2. This Standard also repeals each instrument made under section 7 of the Motor Vehicle Standards Act 1989 that creates a vehicle standard with the name Australian Design Rule 65/00 — Maximum Road Speed Limiting for Heavy Goods Vehicles and Heavy Omnibuses, if there are no other vehicle standards created by that instrument, or amendments to vehicle standards made by that instrument, that are still in force at the commencement of this Standard.

PURPOSE AND SCOPE

This Australian Design Rule (ADR) is part of the Australian motor vehicle standards system and is a national standard for the purposes of the Motor Vehicle Standards Act 1989.

The function of this ADR is to specify devices or systems used to limit the maximum road speed of heavy goods vehicles and heavy omnibuses.

APPLICABILITY

This ADR applies to the design and construction of vehicles as set out in the table hereunder.

Vehicle Category	ADR Category Code *	UNECE Category Code *	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	Not Applicable	
Moped 3 wheels	LB	L2	Not Applicable	
Motor cycle	LC	L3	Not Applicable	
Motor cycle and sidecar	LD	L4	Not Applicable	
Motor tricycle	LE	L5	Not Applicable	
Passenger car	MA	M1	Not Applicable	
Forward-control passenger vehicle	MB	M1	Not Applicable	
Off-road passenger vehicle	MC	M1	Not Applicable	
Light omnibus	MD	M2	Not Applicable	
Heavy omnibus	ME	M3		
over 5 tonnes , up to 14.5 tonnes *'GVM'*			1 July 1991	Nil
over 14.5 tonnes *'GVM'*			1 Jan 1991	Nil
Light goods vehicle	NA	N1	Not Applicable	
Medium goods vehicle	NB	N2	Not Applicable	
Heavy goods vehicle	NC	N3		
up to 300 HP			1 July 1991	Nil
over 300 HP			1 Jan 1991	Nil
Very light trailer	TA	O1	Not Applicable	
Light trailer	TB	O2	Not Applicable	
Medium trailer	TC	O3	Not Applicable	
Heavy trailer	TD	O4	Not Applicable	

65.1. DEFINITIONS

65.1.1. Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005.

65.1.2. '*Set Speed*' - the maximum road speed specified in clause 65.5.

65.2. MAXIMUM ROAD SPEED LIMITING

The maximum road speed capability shall not exceed the maximum road speed specified in clause 65.5 as determined in accordance with the requirements of:

65.2.1. clause 65.6; or

65.2.2. clause 65.3; or

65.2.3. clause 65.4 and clause 65.6.

* The category code may also be in the format L_1, L_A etc.

65.3. MAXIMUM ROAD SPEED LIMITED BY GEARING

The maximum road speed capability shall be limited by selection of drive train gearing calculated by the formula:

$$\text{Maximum road speed capability (km / h)} = \frac{60 \times L}{A \times M}$$

where:

L = the engine manufacturer's rated engine speed above which the engine governing system begins to substantially reduce power;

A= the overall gear reduction between engine and drive wheels giving highest road speed; and

M= the tyre revolutions per kilometre determined from Table 1 (shown below), or as determined by the '*Administrator'* for tyres not listed, which gives the standard number of revolutions per kilometre.

65.3.1. In the case of vehicles where the maximum road speed capability is determined by gearing, the engine manufacturer's rated engine speed shall be permanently shown on a plate affixed to the engine.

TABLE 1
TYRE REVOLUTIONS PER KILOMETRE

Tyre Size	Nominal Revolutions per Kilometre
8.25 * 16	385
8.25 * 20	345
9.00 * 20	325
10.00 * 20	315
11.00 * 20	310
12.00 * 20	295
13.00 * 20	285
14.00 * 20	270
9 R 22.5	345
10 R 22.5	325
11 R 22.5	315
12 R 22.5	305
13 R 22.5	295
10.00 * 22	300
11.00 * 22	295
11.00 * 24	280
12.00 * 24	270
255/70 R 22.5	355
275/70 R 22.5	345
275/80 R 22.5	330
295/80 R 22.5	320
315/80 R 22.5	310
385/65 R 22.5	315
425/65 R 22.5	300

65.4. MAXIMUM ROAD SPEED LIMITED BY ROAD SPEED GOVERNOR

The maximum road speed capability shall be controlled by the use of a road speed governor in accordance with the following:

65.4.1. The maximum road speed setting must not be capable of being temporarily increased or removed.

65.4.2. The road speed limiting function shall not actuate the vehicle's service braking system.

65.4.3. The road speed limiting function may allow normal accelerator control for the purposes of changing gear.

65.4.4. No malfunction shall result in an increase in engine power above that demanded by the position of the driver's accelerator control.

65.4.5. All components necessary for the full function of the road speed limiting function shall be energised whenever the vehicle is being driven.

65.4.6. The following parts shall be provided with the facility for sealing by a recognised authority:

65.4.6.1. the governor road speed adjustment mechanism;

65.4.6.2. the two ends of the link between the road speed limiter and the injection pump;

65.4.6.3. the two ends of the link between the road speed limiter and the device providing the road speed signal;

65.4.6.4. all internal parts of the road speed limiting equipment shall be made resistant to tampering by means of casings capable of being sealed; and

65.4.6.5. the control unit in the case of an electronic road speed governor to prevent unauthorised entry into the box containing the electronic control circuitry.

65.4.7. In the case of electronically re-programmable control devices:

65.4.7.1. The system shall have provision to record and store in retrievable memory the current maximum road speed setting.

65.4.7.2. The **'***Manufacturer*' shall advise the '*Administrator*' of the protocol to be used to retrieve the data referred to in this clause.

65.4.8. In the case of electronically re-programmable control devices the vehicle '*Manufacturer*' shall establish and maintain '*Approved*' arrangements to ensure that the maximum road speed capability of vehicles cannot be changed without necessary authorisation.

These arrangements may be established by the vehicle '*Manufacturer*' in conjunction with the engine manufacturer, and are to restrict the capability to change maximum road speed to authorised agencies such as State or Territory distributorships of the vehicle and/or engine manufacturers.

65.5. MAXIMUM ROAD SPEED CAPABILITY

65.5.1. For a hauling vehicle designed for use in a "Road Train" the maximum road speed capability shall be no greater than that determined by the appropriate State or Territory authority..

65.5.2. For other heavy goods vehicles and heavy omnibuses the maximum road speed capability shall be no greater than 100 km/h.

65.6. TEST OF ROAD SPEED LIMITATION

This test is to determine the maximum road speed capability of vehicles.

A vehicle representative of the vehicle type or a device representative of the road speed governor as appropriate shall meet these requirements.

65.6.1. Test Conditions

65.6.1.1. The settings of the test vehicle including the fuel feed, wheels and tyres, and transmission shall conform to the '*Manufacturer's*' specifications;

65.6.1.2. the tyres shall be bedded and the pressures shall be as specified by the manufacturer;

65.6.1.3. the vehicle shall be at '*Unladen Mass*';

65.6.1.4. the test track surface shall be free from standing water, snow or ice and shall be free from uneven patches and the gradient shall not exceed 2% and gradients shall not vary by more than 1% excluding camber effects; and

65.6.1.5. the mean wind road speed measured at a height at least 1 metre above the ground shall be less than 6 m/s with gusts not exceeding 10 m/s.

65.6.1.6. The instantaneous vehicle road speed shall be recorded throughout the test with a road speed measurement accuracy of at least ±1% at maximum time intervals of 0.1 seconds.

65.6.2. Acceleration Test Method

Using the test conditions specified in clause 65.6.1, and starting from a road speed 10 km/h less that the '*Set Speed*', the vehicle shall be accelerated as much as possible without changing gear by using a fully positive action on the accelerator control. This action shall be maintained without changing gear for at least 30 seconds after the '*Set Speed*' is achieved.

65.6.3. Acceptance Criteria for Acceleration Test Method

65.6.3.1. With each gear which allows a theoretical maximum road speed above the '*Set Speed*' engaged and when tested in accordance with Clause 65.6.2, within the first 10 seconds after reaching the '*Set Speed*' the maximum vehicle road speed shall not exceed 105% of '*Set Speed*' and the rate of change of vehicle road speed shall not exceed 0.5 m/s^2 when measured over a time period greater than 0.1 seconds as shown in Figure 1.

65.6.3.2. With each gear which allows a theoretical maximum road speed above the '*Set Speed*' engaged and when tested in accordance with clause

65.6.2 and more than 10 seconds after reaching the '*Set Speed*', the maximum vehicle road speed shall not differ from the '*Set Speed*' by more than ±3.3% of '*Set Speed*', the maximum vehicle road speed shall not vary by more than 3.3% of the '*Set Speed*' and the rate of change of road speed shall not exceed 0.2 m/s^2 when measured over a time period greater than 0.1 seconds.

65.7. ALTERNATIVE STANDARDS

Road speed governors complying with BS AU 217: Part 1 1987 "Maximum road speed limiters for motor vehicles" marked with a set road speed equal to or lower than the '*Set Speed*' shall be deemed to meet the requirements of Section 65.6.

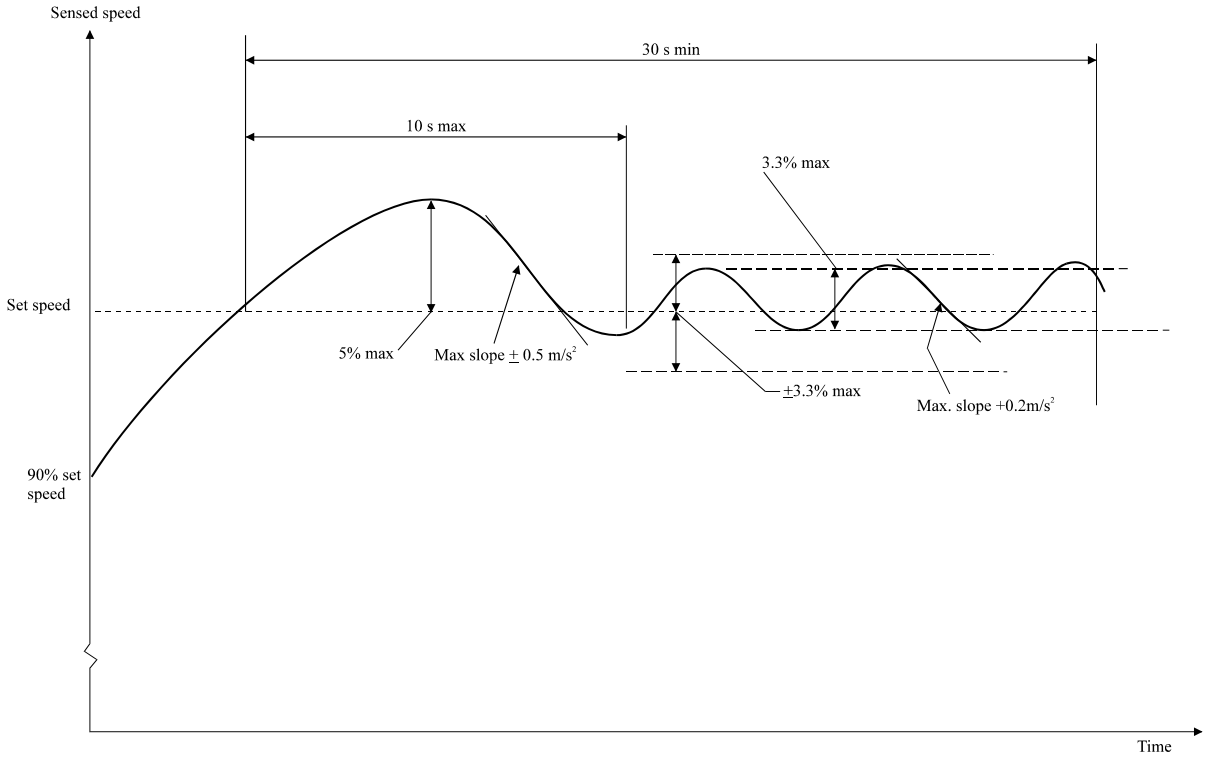

Figure 1. Allowed tolerances of limiter response characteristic