Vehicle Standard (Australian Design Rule 63/00 – Trailers Designed for Use in Road Trains) 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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A. LEGISLATIVE PROVISIONS

A.1. NAME OF STANDARD

A.1.1. This Standard is the Vehicle Standard (Australian Design Rule 63/00 – Trailers Designed for Use in Road Trains) 2006.

A.1.2. This Standard may also be cited as Australian Design Rule 63/00 — Trailers Designed for Use in Road Trains.

A.2. COMMENCEMENT

A.2.1. This Standard commences on the day after it is registered.

A.3. REPEAL

A.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 63/00 — Trailers Designed for Use in Road Trains that is:

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

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

A.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 63/00 — Trailers Designed for Use in Road Trains, 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.

B. FUNCTION AND SCOPE

B.1. The function of this Australian Design Rule is to specify additional requirements for trailers designed for use in '*Road Trains*' having a '*Gross Combination Mass*' not exceeding 125 tonnes.

C. APPLICABILITY AND IMPLEMENTATION

C.1. This ADR applies to the design and construction of vehicles as set out in the table below.

C.2. A '*Pig Trailer*' other than a *'Converter Dolly'* must not be *'Approved'* to this rule.

D. APPLICABILITY TABLE

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	Not Applicable	
Light goods vehicle	NA	N1	Not Applicable	
Medium goods vehicle	NB	N2	Not Applicable	
Heavy goods vehicle	NC	N3	Not Applicable	
Very light trailer	TA	O1	Not Applicable	
Light trailer	TB	O2	Not Applicable	
Medium trailer	TC	O3	1 July 1991	Nil
Heavy trailer	TD	O4	1 July 1991	Nil

63.1. DEFINITIONS

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

63.2. REFER TO C.2.

63.3. NOT USED.

63.4. ELECTRICAL REQUIREMENTS

63.4.1. Electrical connectors having a minimum rated capacity for the lighting circuit of 30 amps at nominal 12V or 15 amps at 24V for connection of lighting and signalling systems must be fitted.

63.4.2. Main line supply cables, other than feeder wires to lamps, must have a DC resistance of not more than 4 mΩ/metre or in the case of copper cables must have a cross–sectional area not less than 5 mm^2.

63.4.3. Every trailer must be equipped with an electrical conductor having a minimum cross–sectional area of 5 mm^2, independent of the trailer *'Coupling'*, or *'Fifth Wheel'* assembly in the case of a *'Semi-trailer'* providing a return path between the electrical circuits of the trailer and that of the drawing vehicle.

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

63.5. MECHANICAL REQUIREMENTS

Every trailer must be fitted with connection devices which meet the following additional requirements:

63.5.1. Location requirements

63.5.1.1. The '*Tow Coupling Overhang*' must not exceed:

63.5.1.1.1. in the case of a trailer other than a '*Semi-trailer'*, 30 percent of the distance from the centre of the front *'Axle Group'* to the centre of the rear *'Axle Group*';

63.5.1.1.2. in the case of a *'Semi-trailer'* 30 per cent of the distance from the *'Point of Articulation'* to the centre of the rear *'Axle Group*'.

63.5.1.2. The height of the towing attachment and the '*Drawbar*' pivots determined in the unladen condition must be 875 ± 75 mm.

63.5.1.3. The vertical axis of the *'Coupling*' pivot must be not more than 300 mm forward from the rear–most projection of the trailer.

63.5.1.4. The '*Drawbar Length'* must exceed 3.0 m but must not exceed 5.0 m.

63.5.2. Marking and strength requirements

Unless otherwise *'Approved'* all connection devices must conform with the marking and strength requirements as specified below:

63.5.2.1. *'Fifth Wheel'* assemblies must comply with the requirements of Australian Standard 1773-1990 "Articulated Vehicles - Fifth Wheel Assemblies" and have a '*D-value*' of not less than 162 kN (16.5 t).

63.5.2.2. *'Fifth Wheel Kingpins'* must comply with the requirements of Australian Standard 2175-1990 "Articulated Vehicles - Kingpins" and have a *'D-value*' of not less than 162 kN (16.5 t).

63.5.2.3. Tow *'Coupling'* assemblies must comply with Australian Standard 2213-1984 "50 mm Pin-type Couplings and Drawbar Eyes for Trailers" and must have a '*D-value'* of not less than 186 kN (19.0t).

63.5.2.4. The *'Drawbar*' and *'Towbar'* must withstand the following forces without incurring any residual deformation that would interfere with or degrade the function of the assembly, nor must there be any breaks, cracks, or separation of components:

63.5.2.4.1. Longitudinal tension and compression of 300 kN; or

63.5.2.4.2. A dynamic force of ± 112 kN for 2 million cycles. The frequency not to exceed 10 Hz but must be chosen not to coincide with the natural frequency of the system.