



Road Trains

September 2001

**This information sheet
tells you:**

- ▼ **where you are permitted to drive;**
- ▼ **the maximum dimensions;**
- ▼ **axle spacing requirements;**
- ▼ **coupling and braking requirements; and**
- ▼ **the operating conditions (including warning signs)**

for Road Trains.



Roads and Traffic Authority
www.rta.nsw.gov.au

Road Trains

REGULATIONS

Your job as a driver or owner/operator of a Road Train is to make sure you know what regulations apply to these vehicles and that you follow them. If you don't follow the regulations you will be breaking the law. This could cost you a lot of money in fines.

SAFE TRAVEL

For the safety of others, yourself and your vehicle, you must make sure that you operate your vehicle in a responsible way at all times. Ignoring safety regulations could result in loss of life and income.

WHAT DOCUMENTS YOU MUST CARRY

The driver of the Road Train must carry a copy of this information sheet, or the equivalent formal notice, in the driving compartment. You may be asked to show the document to a police officer or RTA officer. If you don't have a copy of the information sheet, or notice, in your Road Train you could be fined.

You must have a drivers' licence that allows you to drive Road Trains or that covers a category of vehicle that includes Road Trains (National Licence Class MC (multi-combination))

WHERE YOU MAY LEGALLY DRIVE

You may only operate your Road Train on approved routes. You must observe the travel restrictions and conditions applying to an approved route or area. Maps and lists of approved routes, restrictions and conditions, are available from the RTA. Or you can check the website at www.rta.nsw.gov.au.

If you wish to travel on any road other than those on the approved routes list, you will need to apply to the RTA, or appropriate Council (for local roads), and follow the requirements set out in the Route Assessment Guidelines for Road Trains and B-Doubles.

It is your responsibility to find out what routes are approved for Road Trains.



Road Trains

ROUTE ASSESSMENT PROCEDURES AND ROUTE INFORMATION FOR ROAD TRAINS

As an operator of a Road Train you must get approval for any routes or terminals that have not previously been approved for Road Trains. Contact an RTA officer (listed below) for the particular route.

Contact officers will:

- discuss route and terminal assessment procedures with you.
- give you copies of gazettals of route approvals.
- tell you if trials are necessary for a route or terminal.

The RTA may also need to talk to other organisations, such as Councils. After any assessment and trials, the RTA Regional Manager will make a decision. You will then get a letter telling you of the decision.

ROUTE INFORMATION

You can find information about Road Train routes in the permit notice and on the Road Train map published by the RTA (Road Train and B-Double Routes in NSW and ACT).

Approved routes are updated regularly on the RTA website at www.rta.nsw.gov.au. You can find them by looking under “registration/heavy vehicle information/permit notices”. You can also get information about new route approvals from RTA regional contact officers (listed below).

Contact officers

Route Area		Phone	Fax
Northern NSW	Tamworth	02 6768 1401	02 6768 1499
Hunter Region	Newcastle	02 4924 0331	02 4924 0342
Southern NSW	Wollongong	02 4221 2460	02 4227 3705
South Western NSW	Wagga Wagga	02 6938 1145	02 6938 1183
Sydney		02 9831 0983	02 9831 0111
Western NSW	Parkes	02 6861 1478	02 6861 1414



Road Trains

SPECIFIC PERMITS REQUIRED FOR B-TRIPLES ETC

You may operate the types of Road Trains listed below only if you have been issued a specific permit by the RTA's Permits Unit:

- AB-Triple
- BA-Triple
- B-Triple
- BB-Quad

You **cannot** operate these types of Road Trains under the terms of this information sheet or the equivalent formal notice.

DISTANCE BETWEEN VEHICLES

Unless you are:

- overtaking
- driving in a built up area or
- driving on a multi-lane road

you must travel at least 200 metres behind a long vehicle (7.5 metres long including load) in Road Train areas, or 60 metres behind a long vehicle in all other areas.

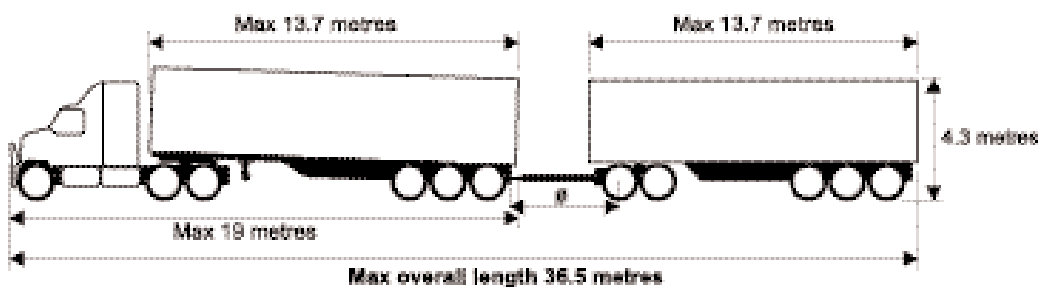
MASS AND DIMENSION LIMITS

Maximum dimension limits

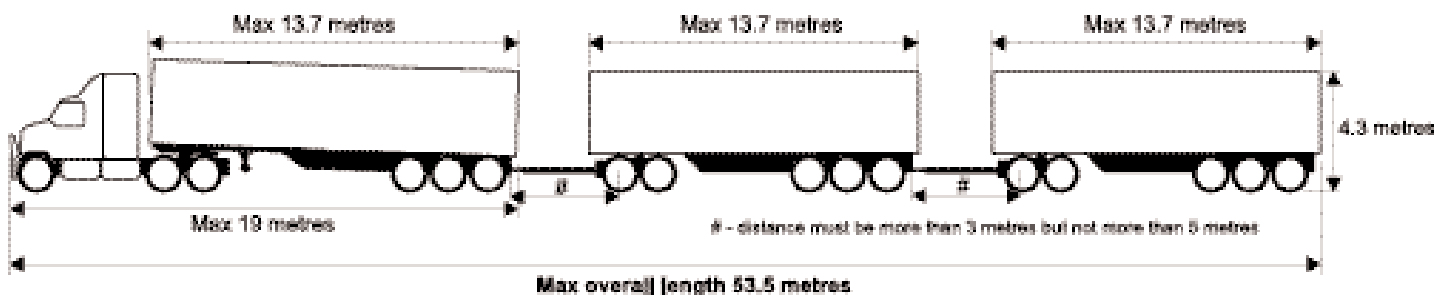
Hauling units and semi-trailers must comply with Third Edition Australian Design Rule 43.

A Road Train must not be more than **36.5 metres long**, except when travelling on a road on the RTA's list of approved routes for Road Trains up to 53.5 metres long. Then your Road Train may be up to 53.5 metres long.

A Road Train must not be more than **4.3 metres high**, unless you comply with the conditions set out in the 4.6 Metre High Route Notice 1999. You may then load your Road Train up to 4.6 metres high.



θ - distance must be more than 3 metres but not more than 5 metres



Road Trains

Maximum axles and axle group mass limits

The maximum axle mass limits for a Road Train must be the lowest of:

steering single axle	6.0 tonnes gross
single axle consisting of 4 tyres	9.0 tonnes gross
tandem axle group consisting of 8 tyres	16.5 tonnes gross
tri-axle group consisting of 12 tyres	20.0 tonnes gross
tri-axle group consisting of 6 tyres with section widths of at least 375 millimetres	20.0 tonnes gross

or

the manufacturer's mass ratings, or

the sum of the mass limits for the tyres fitted to the axles and axle groups

Table 1



Maximum gross mass limits

If you operate a Road Train up to **36.5 metres long**, the maximum gross mass limits must be the lowest of:

- 79.0 tonnes gross,
- the sum of the axle and axle group mass limits shown in Table 1,
- the sum of the manufacturer's mass limits for the prime mover (GVM) and the semi-trailers (GTM), or
- the gross combination mass (GCM) limit specified by the prime mover manufacturer.

If you operate a Road Train up to **53.5 metres long** the gross mass limit must be the lowest of:

- 115.5 tonnes gross,
- the sum of the axle and axle group mass limits in - Table 1,
- the sum of the manufacturer's mass limits for the prime mover (GVM) and the semi-trailers (GTM), or
- the gross combination mass (GCM) limit specified by the prime mover manufacturer.

Mass limits relating to axle spacing

Your Road Train must not have a mass limit greater than that specified by the RTA set out in the Table 2. The mass limits apply to the sum of the masses of each axle group, or single axle that fall within the distance being measured. This includes the axles on each end of the distance being measured.

The mass limits in Table 2 apply to the sum of the masses of each axle group or single axle. This includes all axles and axle groups that fall within the distance being measured.

For any Road Train, the sum of the axle loads of the axles in any two axle groups next to each other must not be greater than that calculated in the formula opposite. This also applies to any single axles and the axles in axle groups that are next to them.

$$M = 3L + 12.5$$

Where:

M is the mass limit in tonnes, and

L is the distance in metres

Table 2

Road Trains

The distances in Table 2 refer to:

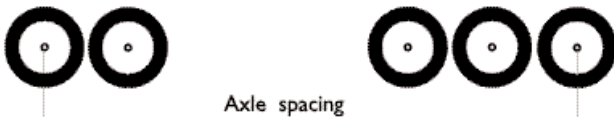
- The distance between the middle of a single axle to the middle of any other single axle



- The distance between the middle of a single axle to the middle of the furthest axle in an axle group



- The greatest distance between the middles of axles of any two axle groups.

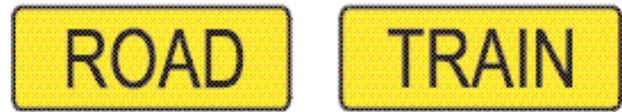


2.5m / 15 tonnes rule

The total mass of a vehicle and any load, **must not be greater than 15 tonnes** if the distance between any two axles that are not part of the same axle group is **less than 2.5 metres**.

The total mass of any vehicle you are towing, and any load, **must not be greater than 15 tonnes** if the distance between the axle furthest to the back of the vehicle in front and the axle furthest to the front of the following vehicle is **less than 2.5 metres**.

ROAD TRAIN WARNING SIGNS

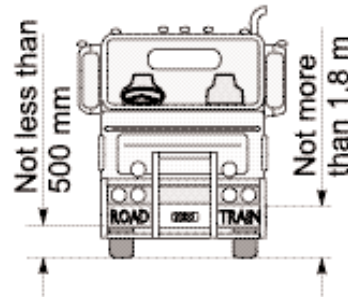


If your Road Train is longer than 30 metres you must clearly display a “ROAD TRAIN” warning sign.

If you operate a Road Train that is longer than 22 metres but not more than 30 metres long you must display a “ROAD TRAIN” or “LONG VEHICLE” warning sign.

If the warning sign is in two pieces, one word must appear on one piece and the other word on the other piece. If you are using a “Long Vehicle” sign, attach it horizontally at the back of the combination. If you are using “Road Train” warning signs, attach them horizontally – one at the front and one at the back of the combination.

The “Long Vehicle” or “Road Train” warning sign must comply with the requirements of the *General Notice for the Operation of Road Trains 2000*.



Road Trains

STANDARDS AND SPECIFICATIONS

A Road Train must comply with each applicable Australian Design Rule (ADR). Where the ADR is different from a standard in this information sheet, you must comply with the ADR.

Power of Road Train hauling unit

If the manufacturer does not say what the GCM is of a vehicle forming part of a Road Train, the total mass of the combination, and any load, must not be greater than the number of kilograms worked out using the following formula:

$$\text{Mass in kilograms} = (K \times M \times R \times T) / 16$$

where:

K means:

- a) 0.055 if a single drive axle is fitted to the motor vehicle,
- b) 0.053 if a single drive tandem axle is fitted to the motor vehicle, or
- c) 0.051 if a dual drive tandem axle group is fitted to the motor vehicle.

M means the number of tyre revolutions per kilometre as specified by the tyre manufacturer for the tyres fitted to the driving axle or axles.

R means the overall gear reduction between engine and drive wheels.

T means the maximum engine net torque in Newton-metres.

SPEED LIMITING

Your Road Train must be speed limited to 90 km/h according to the *Third Edition Australian Design Rule 65*.

Remember, it is a crime to drive faster than the speed limit set by the law.

VEHICLE PERFORMANCE

Tracking

When travelling in a straight line on a level, smooth surface, all units in a Road Train must track in the path of the hauling unit without shifting or swerving more than 100 mm either side of the path of the hauling unit.

Braking and Coupling Requirements

Prime movers, converter dollies and semi-trailers used in Road Trains must meet all normal vehicle standards. You must also make sure you follow the standards specific to Road Trains for braking and coupling requirements.

It is your responsibility to find out what these standards are and to comply with them at all times. You will find detailed specifications in the General Notice for the *Operation of Road Trains 2000* or check the RTA website at www.rta.nsw.gov.au.





DETAILED INFORMATION

For detailed information about these regulations, refer to the NSW Government Gazette No. 159 of 8 December 2000.

You can get copies of notices referred to in this information sheet, and extra copies of this sheet, from any motor registry or the RTA Permits Unit, Ground Level, 260 Elizabeth Street, Surry Hills, NSW, 2010.

FURTHER ENQUIRIES

If you have any questions about the new regulations, or the contents of this information sheet, contact:



Roads and Traffic Authority
www.rta.nsw.gov.au

**The Roads and Traffic Authority
Freight Policy Unit
Level 9, 260 Elizabeth Street
Surry Hills NSW 2010
Phone 131 782**