

# Vehicle Standards Information

VSI.62 | 28 September 2012

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## Transporting yachts on trailers

### Purpose

This Vehicle Standards Information (VSI) No. 62 is intended to:

- enhance road safety for all road users by encouraging operators to use the most appropriate towing vehicle in a vehicle and trailer combination that is carrying a small yacht, commonly known as a 'trailer yacht' or 'trailer sailer', or similar sailboat.
- provide a summary of the dimension limits applying to vehicle and trailer combinations used for transporting the above type of small yachts on New South Wales roads.

For the purpose of this publication, small yachts and similar sailboats are referred to as 'yachts', and a vehicle and trailer combination is referred to as a 'combination'.

### Introduction

The *Road Transport (Vehicle Registration) Regulation 2017* (the **Regulation**) limits the width, height, length and some internal dimensions of vehicles and/or combinations. In addition, the *Road Transport (Mass, Loading and Access) Regulation 2005* (the **MLAs**) limits the mass and dimensions of vehicles and/or combinations when loaded. These regulations are intended to ensure that vehicles using the road network are compatible with the road systems and do not present a danger to other road users.

For explanation of terms used in this VSI, see 'Glossary' on page 5.

### Dimension and mass limits

A vehicle and trailer combination must be within the dimension limits imposed under the **Regulation** and **MLAs** if it is to be allowed general access to the road network.

In NSW, the dimension limits applicable to a combination depends on the mass of the combination, generally separated into two categories as follows:

- vehicles or combinations with a gross vehicle mass (GVM) and gross combination mass (GCM) not exceeding 4.5 tonnes
- vehicles or combinations with a GVM or GCM exceeding 4.5 tonnes.

This VSI explains how the requirements of the Regulation and the MLAs are applied to the different categories of combination when the trailer is carrying a load. The major difference is that:

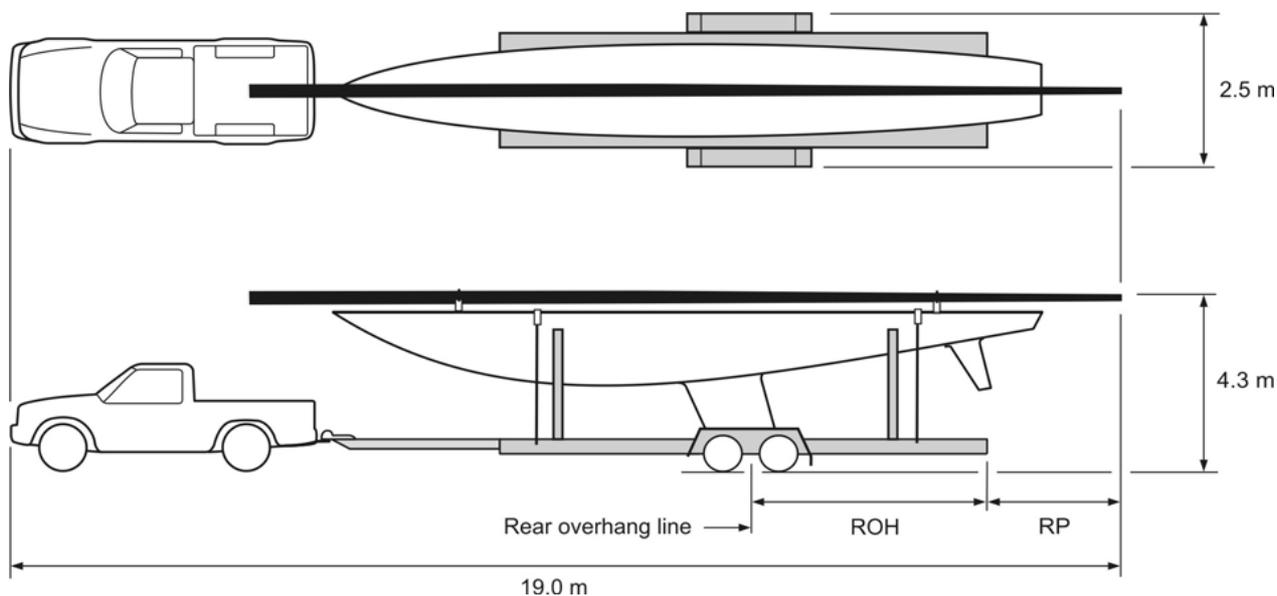
- in a combination not exceeding 4.5 tonnes, the rear projection of the load is measured beyond the rear overhang dimension of the trailer (see Figure 1 on page 2).
- in a combination exceeding 4.5 tonnes, the rear projection of the load is measured within the rear overhang dimension of the trailer (see Figure 2 on page 3).

Apart from the dimensions shown in this VSI, the individual vehicles comprising the combination, with or without load, must be within the applicable regulatory dimension limits – see **VSI.05 Vehicle dimension limits** for more information.

## Vehicle and trailer combination not exceeding 4.5 tonnes GVM and GCM

The following dimension limits apply to a combination with a GVM and GCM up to and including 4.5 tonnes.

**FIGURE 1: COMBINATION UP TO 4.5 TONNES GVM AND GCM**



**Rear overhang (ROH):** In this combination the maximum rear overhang allowed under the Regulation is measured to the rear of the trailer, and is no more than the length of the front load carrying area ahead of the rear overhang line, or 3.7 metres, whichever is the lesser\*.

**Note:** that on boat trailers the length of the front load carrying area is often difficult to define, so the maximum allowable rear overhang of 3.7 metres will normally apply.

**Rear projection (RP):** 1.2 metres, or more under certain conditions – see below.

\*see page 5 for more information on front load carrying area, and rear overhang line.

### Rear projection exceeding 1.2 metres

Rear projection may exceed 1.2 metres provided the overall length of the combination, together with the loading or equipment on it, is no more than 19.0 metres.

### Warning devices for projecting load or equipment

If the rear projection is greater than 1.2 metres, the rear of the load or equipment must have attached a brightly coloured flag or piece of material not less than 300 mm square. In addition to the flag, when travelling at night or in adverse weather conditions that restrict visibility, a red light that can be seen for 200 metres or at least two red reflectors capable of projecting a red reflection of light from the light of any following vehicle must be attached.

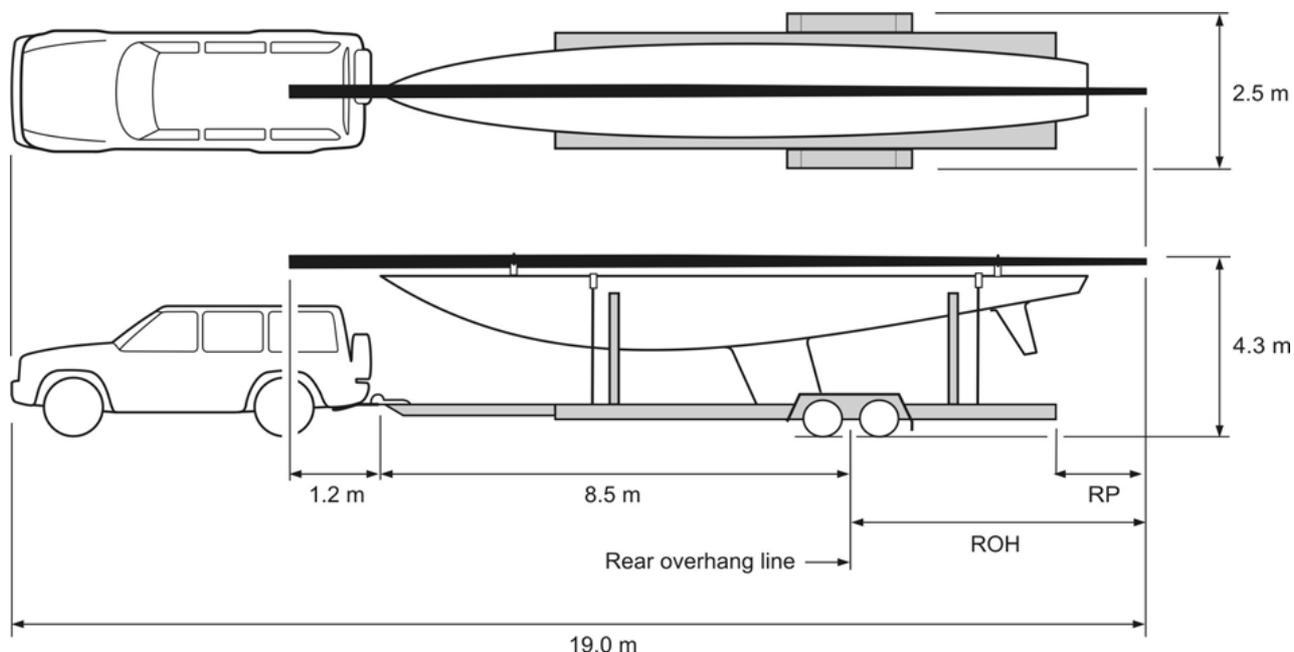
These requirements also apply to any load or equipment that projects less than 1.2 metres if it projects in such a way that it is not readily visible to a person following immediately behind the vehicle.

## Vehicle and trailer combination not exceeding 4.5 tonnes GVM and GCM

The following dimension limits apply to a combination with a GCM exceeding 4.5 tonnes, or a combination that includes a vehicle with a GVM exceeding 4.5 tonnes.

Projecting loads must not exceed these limits unless the vehicle operates under a notice or permit.

**FIGURE 2: COMBINATION EXCEEDING 4.5 TONNES GVM OR GCM**



**Rear overhang (ROH):** In this combination the maximum rear overhang allowed under the Regulation is measured to the rear of the trailer, and is no more than the length of the front load carrying area ahead of the rear overhang line, or 3.7 metres, whichever is the lesser\*.

Note that on boat trailers the length of the front load carrying area is often difficult to define, so the maximum allowable rear overhang of 3.7 metres will normally apply.

**Rear projection (RP):** 1.2 metres, or more under certain conditions – see below.

\*see page 5 for more information on front load carrying area, and rear overhang line.

### Rear projection exceeding 1.2 metres

Rear projection may exceed 1.2 metres provided:

- it is contained within the ROH dimension as shown in Figure 2 above
- the overall length of the combination, together with the loading or equipment on it, is no more than 19.0 metres.

### Warning devices for projecting load or equipment

If the rear projection is greater than 1.2 metres, in daytime the rear of the load or equipment must have attached a brightly coloured flag or piece of material not less than 300 mm square. When travelling at night the warning signal must be a red light that can be seen for 200 metres

It is recommended that these warning devices are also used for any load or equipment that projects less than 1.2 metres if it projects in such a way that it is not readily visible to a person following immediately behind the vehicle.

## Towing ratio

A combination that is carrying a yacht must comply with the regulatory requirements applicable to all general access combinations i.e. the mass of the laden trailer must not exceed the lesser of:

- the capacity of the towbar, tow coupling and any other towing attachment/s e.g. safety chains.
- the aggregate trailer mass (ATM) specified for the trailer by its manufacturer
- the maximum towing capacity specified by the manufacturer of the towing vehicle.

Where the manufacturer of the towing vehicle has not specified the maximum towing capacity, the following maximum towing capacity applies:

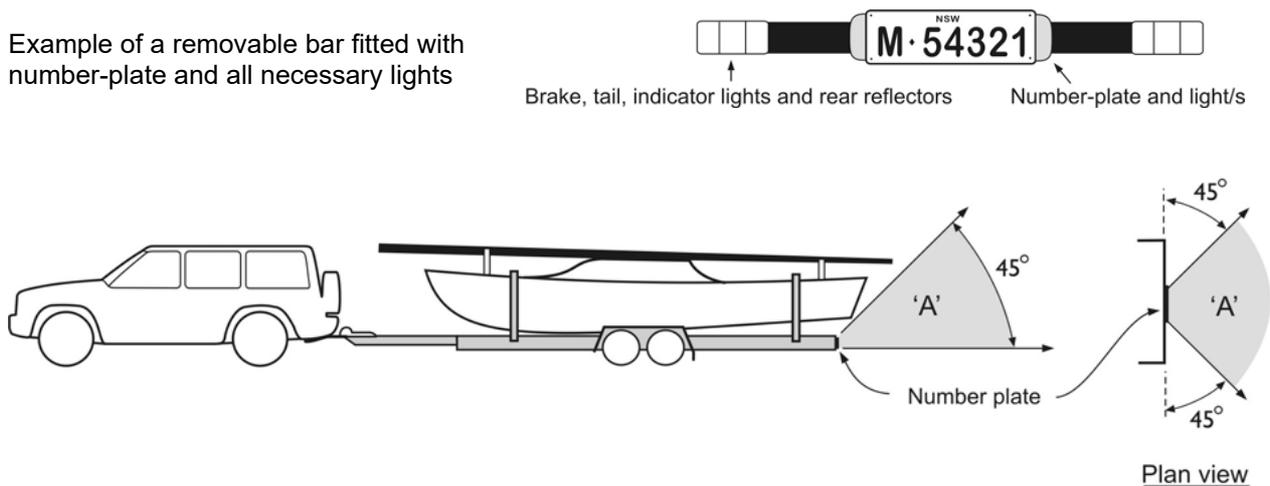
- 1½ times the unladen mass of the towing vehicle, providing the trailer is fitted with brakes that are working properly, or
- the unladen mass of the towing vehicle, if no trailer brakes are fitted.

The total mass of a combination must not exceed the towing vehicle's GCM

## Visibility of the trailer's rear lights and number-plate

The trailer's brake, tail, direction indicators, number-plate light/s, rear reflectors and number-plate must be clearly visible. The necessary lights, indicators, reflectors and number-plate may be attached to a removable bar, such as that shown in Figure 3 below, that can be fitted to the trailer or at the rear of the load as required.

**FIGURE 3: COMBINATION UP TO 4.5 TONNES GVM AND GCM**



The trailer number-plate must be clearly visible from 20 metres at all points within the arcs 'A' shown in Figure 3. If any part of the load obscures the number-plate, the plate must be moved to the rear of the yacht for the duration of the journey. The plate must face the rear and its top edge must not be more than 1.3 metres above the ground. A light must be provided that will enable the number-plate to be read from 20 metres at night or in adverse weather conditions

## Oversize combinations

It is sometimes impracticable for a combination carrying a yacht to be within the maximum dimension limits imposed by the **Regulation** or the **MLAs**. There may also be instances where a relatively light, and therefore inappropriate, towing vehicle is used to keep the combination below 4.5 tonnes.

To encourage operators to use the most appropriate towing vehicle (generally one of the larger 4-wheel-drive type vehicles with the latest safety features), the '*Class 1 Yacht Trailer Combination Exemption Notice 2012*' (the **Notice**) has been issued by TfNSW. Under the Notice, a combination exceeding 4.5 tonnes and carrying a yacht may be driven on the road provided it:

- does not exceed 19.0 metres in length, and
- does not have a rear overhang exceeding 5.0 metres, and
- complies with all of the requirements and conditions of the Notice.

A copy of the '**Notice**' must be carried in the driving compartment whenever the combination is operating under the '**Notice**' so that it can be produced if requested by a police officer or an authorised officer.

If the dimensions of the combination exceed the limits imposed by the Notice, a specific permit issued by the TfNSW Special Permits Unit is required – see page 6 for contact details

## Travelling interstate

It is important to note that operating conditions vary across Australia and permits may be required from other State and Territory road authorities for travel in their respective jurisdictions. It is advisable to contact the relevant road authority before travelling interstate with the type of combination described in this VSI.

## Glossary

**Aggregate trailer mass (ATM)** is the laden mass of the trailer. The ATM is specified by the trailer manufacturer and is shown on the identification plate fitted to the trailer.

**Front load carrying area** is that part of the trailer forward of the rear overhang line, and on which a load can be carried.

**General access** means the combination may operate on any road, except where a load or dimension restriction is indicated by a sign – see VSI No. 5 for more information.

**Gross combination mass (GCM)** is the value specified by the manufacturer of a vehicle as being the sum of its GVM plus the maximum loaded mass of any trailer that it can tow in combination.

**Gross vehicle mass (GVM)** of a vehicle means the maximum loaded mass of the vehicle as specified by the vehicle's manufacturer.

**Rear overhang** is the distance measured between the rear overhang line and the rear of the trailer or of the load, depending on the mass of the combination.

**Rear overhang line** is the point from which rear overhang is measured. Most trailers used to carry a yacht have a single axle, or a tandem axle group; the rear overhang is measured from the vertical centreline of the single axle, or the centre of the axle group. For a trailer with a different axle configuration, see VSI No. 5 for more information.

**Rear projection** is the distance the load projects beyond the rear of the trailer.

**Unladen mass of the towing vehicle** is the vehicle's mass, unoccupied and unladen, with all fluid reservoirs filled to nominal capacity except for fuel, which shall be 10 litres only, and with all standard equipment and any options fitted. This is found on the vehicle's registration document, or can be checked at a licensed weighbridge.

## **Attachment**

Copy of 'Class 1 Yacht Trailer Combination Exemption Notice 2012'.

## Roads and Traffic Authority

### ROAD TRANSPORT (GENERAL) ACT 2005

#### Rowing Boat Trailer Combination Exemption Notice 2011

I, MICHAEL BUSHBY, Chief Executive of the Roads and Traffic Authority, pursuant to Clause 54 of the Road Transport (Mass, Loading and Access) Regulation 2005, exempt motor vehicle and trailer combinations to which this Notice applies from the requirement of Clauses 53 (1) (a) (iii) and 53 (1) (f) (ii) of the Road Transport (Mass, Loading and Access) Regulation 2005 as provided in the Schedule of this Notice.

MICHAEL BUSHBY,  
Chief Executive,  
Roads and Traffic Authority

#### SCHEDULE

##### PART 1 – PRELIMINARY

#### 1.1 Citation

This Notice may be cited as the Rowing Boat Trailer Combination Exemption Notice 2011.

#### 1.2 Commencement

This Notice takes effect on and from the date of publication in the *New South Wales Government Gazette*.

#### 1.3 Effect

This Notice remains in force up to and including 31 October 2016 unless it is amended or repealed earlier.

#### 1.4 Interpretation

- 1.4.1 Unless stated otherwise in this Notice, the words and expressions used in this Notice have the same meaning as those defined in the Road Transport (General) Act 2005.
- 1.4.2 Except where a contrary intention is indicated, the notes in the text of this Notice do not form part of this Notice.

##### PART 2 – APPLICATION

#### 2.1 Application

2.1.1 This Notice applies to a combination:

- (1) which comprises:
  - (a) a motor vehicle; and
  - (b) a rowing boat trailer designed to carry dragon boats, outrigger canoes, kayaks, rowing shells or similar rowing boats; and
- (2) where the trailer is loaded comprised of vessels as described in 2.1.1 (1) (b); and
- (3) which has a Gross Vehicle Mass or Gross Combination Mass not exceeding 4.5 tonnes.

##### PART 3 – DIMENSIONS

#### 3.1 Dimension Limits

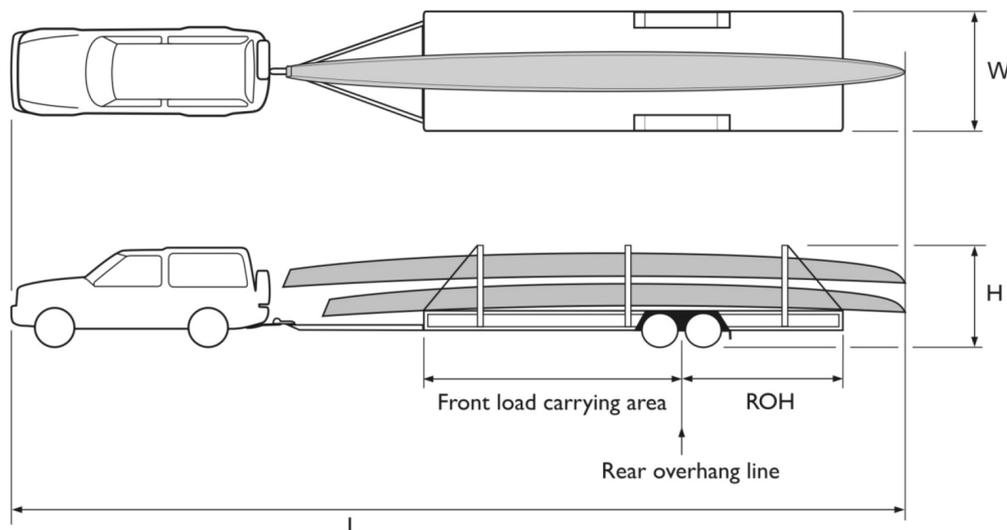
- 3.1.1 The combination and its load must not exceed an overall length of 19.5 metres.
- 3.1.2 The combination and its load must not exceed the dimension limits prescribed in Table 1.
- 3.1.3 As far as is practicable, any projection beyond the rear of the vehicle must be minimised.

**Table 1: Dimensions**

<i>Rear Overhang (ROH)</i>	<i>Length (L)</i>	<i>Height (H)</i>	<i>Width (W)</i>
The rear overhang must not exceed the lesser of: (a) the length of the load carrying area, or body ahead of the rear overhang line, and (b) 3.7 metres.	19.5 metres	4.3 metres	2.5 metres

Note: The rear overhang (ROH) means the distance between the rear overhang line and the rear of the vehicle.

Diagram 1: Dimensions



## PART 4 – OPERATING, TRAVEL AND OTHER CONDITIONS

## 4.1 Operating Conditions

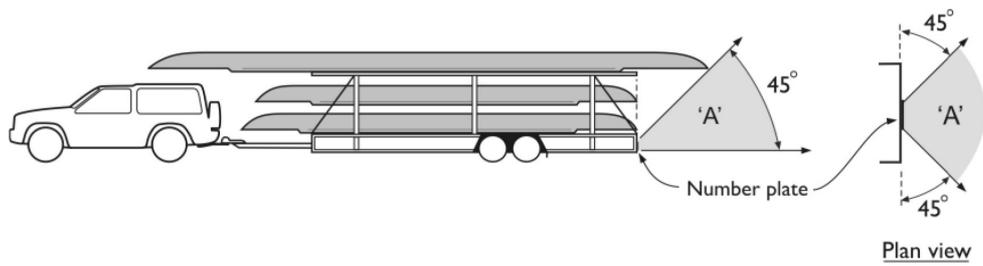
- 4.1.1 A copy of this Notice must be carried in the driving compartment whenever the combination is operating under this Notice, and must be produced when the driver is requested to do so by a police officer or an authorised officer.

## 4.2 Travel Conditions

- 4.2.1 When the load extends more than 3.7 metres from the rear overhang line, the combination must not travel in a “Limited Access Zone”, as defined in the **SPV Travel Restrictions and Approved Routes** published by the Authority as Appendix 2 to the **Class 1 Special Purpose Vehicle Notice 2011**, between the hours of 6.30am and 9.30am and/or between 3.30pm and 6.30pm on business days.
- 4.2.2 If any of the trailer’s lights, directional indicators or reflectors are obscured, an additional set must be attached at the rear of the load. The additional lights, directional indicators and reflectors may be attached to a removable light panel.
- 4.2.3 The trailer is to be fitted with an **OVERSIZE** and a **DO NOT OVERTAKE TURNING VEHICLE** sign, compliant with Part 7 of Schedule 2 to the Road Transport (Mass, Loading and Access) Regulation 2005, as close as possible to the rear of the combination.
- 4.2.4 A red flag or other suitable object of not less than 300 mm square must be fitted at the extreme rear of the load and the flag or object is kept clearly visible as a warning to persons on the roadway in the near vicinity of the vehicle or trailer.
- 4.2.5 The combination is restricted to a speed limit of 80 km/h.
- 4.2.6 The laden weight of the trailer must not exceed
- the capacity of the towing attachment fitted to the motor vehicle, or
  - the maximum laden weight for the trailer.

Note: For the purposes of 4.2.6, the **maximum laden weight** for the trailer is:

- the maximum laden weight for the trailer that the manufacturer of the motor vehicle has specified in respect of the motor vehicle, or
  - if the manufacturer of the motor vehicle has not specified such a maximum, the manufacturer cannot be identified or the motor vehicle has been modified to the extent that the manufacturer’s specification is no longer appropriate:
    - one and a half times the unladen weight of the motor vehicle if the trailer is fitted with a braking system that is working properly, or
    - the unladen weight of the motor vehicle in any other case.
- 4.2.7 Number plates must not be obscured and must be visible within an arc of 45 degrees to the top and sides of the plates as shown in Diagram 2. If necessary, the number plate must be relocated to the rear of load. Provision must be made to illuminate the number plate.

**Diagram 2: Number plate visibility**

Number plates must be clearly visible from 20 metres at all points within arcs 'A'

## Further information

### NSW Legislation

- *Road Transport (Vehicle Registration) Regulation 2017*

[legislation.nsw.gov.au](http://legislation.nsw.gov.au)

### Service NSW (SNSW)

To register a vehicle, apply for a permit and to apply for a driver or rider license

To locate your nearest SNSW office

<https://www.service.nsw.gov.au/> | T 13 77 88

### Transport for NSW

For Information & advice related to vehicle registration, permits & driver/rider licenses

[roads-waterways.transport.nsw.gov.au](http://roads-waterways.transport.nsw.gov.au) | T 13 22 13

### TfNSW Technical Enquiries

For Information & advice related to vehicle construction, modification and registration requirements in NSW

PO Box 1120, Parramatta NSW 2124

E [technical.enquiries@transport.nsw.gov.au](mailto:technical.enquiries@transport.nsw.gov.au) | T 1300 137 302 | F (02) 8837 0037

### TfNSW Vehicle Safety Compliance Certification Scheme (VSCCS)

For Information & advice related to VSCCS Licensed Certifiers.

[VSCCS](http://VSCCS) | E [vscs@transport.nsw.gov.au](mailto:vscs@transport.nsw.gov.au) | T 1300 336 206

### Department of Infrastructure, Transport, Regional Development and Communications

For information related to building or importing road vehicles for use in road transport within Australia; also for information on & to access Australian Design Rules (ADRs) & associated Circulars; Vehicle Standards Bulletins (VSBs)

GPO Box 594 Canberra ACT 2601

[infrastructure.gov.au](http://infrastructure.gov.au) | T 1800 815 272 | F (02) 6274 6013

### National Heavy Vehicle Regulator

For Information & advice related to the construction and modification of heavy vehicles (ie those with a GVM or ATM exceeding 4.5tonnes); requirements for heavy vehicle permits & exemptions.

PO Box 492, Fortitude Valley Q 4006

[nhvr.gov.au](http://nhvr.gov.au) E [info@nhvr.gov.au](mailto:info@nhvr.gov.au) | T 1300 696 487 | F (07) 3309 8777