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Further information
For further information about the National Class 2 Road Train Operator’s Guide please contact:

National Heavy Vehicle Regulator
E: info@nhvr.gov.au
P: 1300 MYNHVR (1300 696 487)
www.nhvr.gov.au
Introduction

The National Class 2 Road Train Operator’s Guide outlines the requirements for operating a road train under the National Class 2 Road Train Authorisation (Notice) 2020 [the Notice] in the participating states of New South Wales, Queensland, South Australia and Victoria.

The Notice commences on 4 June 2020.

Eligible road trains

Figure 1: An example of a road train (AB-triple)

Road train combination types eligible to operate under the Notice are shown in Table 1. Operators of road trains that cannot operate under the Notice must apply for an access permit.

Table 1: Eligible road train combinations under the Notice

<table>
<thead>
<tr>
<th>Type 1 combinations (up to 36.5m long)</th>
<th>Length limit (m)</th>
<th>States where operation is permitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-double(^1)</td>
<td>36.5*</td>
<td>NSW  ☑   QLD  ☑   SA  ☑   VIC  ☑</td>
</tr>
<tr>
<td>B-triple (Modular)</td>
<td>35.0</td>
<td>NSW  ☑   QLD  ☑  SA  ☑  VIC  ☑</td>
</tr>
<tr>
<td>B-triple</td>
<td>36.5</td>
<td>NSW  ☑   QLD  ☑  SA  ☑  VIC  ☑</td>
</tr>
<tr>
<td>AB-triple(^2)</td>
<td>36.5</td>
<td>NSW  ☑   QLD  ☑  SA  ☑  VIC  ☑</td>
</tr>
<tr>
<td>Rigid truck towing two trailers</td>
<td>36.5</td>
<td>NSW  ☑  SA  ☑  VIC  ☑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type 2 combinations (up to 53.5m long)</th>
<th>Length limit (m)</th>
<th>States where operation is permitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-triple</td>
<td>53.5</td>
<td>NSW  ☑   QLD  ☑   SA  ☑   VIC  ☑</td>
</tr>
<tr>
<td>AB-triple</td>
<td>44.0(^1)</td>
<td>NSW  ☑   QLD  ☑   SA  ☑   VIC  ☑</td>
</tr>
<tr>
<td>BAB-quad</td>
<td>53.5</td>
<td>NSW  ☑   QLD  ☑   SA  ☑   VIC  ☑</td>
</tr>
<tr>
<td>ABB-quad</td>
<td>53.5</td>
<td>NSW  ☑   QLD  ☑   SA  ☑   VIC  ☑</td>
</tr>
<tr>
<td>Rigid truck towing two trailers</td>
<td>47.5</td>
<td>NSW  ☑   QLD  ☑  SA  ☑  VIC  ☑</td>
</tr>
</tbody>
</table>

\(^{1}\) A separate and additional road network for A-doubles up to 30.0m long exists in South Australia only.

\(^{2}\) AB-triples are sometimes called AB-doubles.

The eligibility of Type 1 road train combinations varies between states (e.g. Table 1 shows that A-doubles have access in all participating states, while B-triples and AB-triples only have access in New South Wales, Queensland and South Australia.

Type 2 road trains are granted access as a group. Table 1 shows the range of allowable Type 2 combinations with access in New South Wales, Queensland and South Australia—but not Victoria.

Two additional road networks are available in South Australia:

• A-doubles up to 30.0m long
• AB-triples up to 42.0m long.

For these shorter combinations, these networks are extensions of the ones for 36.5m A-doubles and 44.0m AB-triples respectively.

To be eligible to operate under the Notice, road trains must fully comply with all requirements of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation.
Livestock transport

Road trains may be used to transport livestock. They typically have two, three or four decks, and a total height of up to 4.6m. Their operation is authorised under the Notice.

Livestock-transport-specific mass requirements vary between states and are summarised in Table 2.

Table 2: Mass limits for livestock transport road trains by state and territory

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Livestock transport road train mass limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>Livestock transport mass limits</td>
</tr>
<tr>
<td>Queensland</td>
<td>Livestock volumetric loading</td>
</tr>
<tr>
<td>South Australia</td>
<td>As per non-livestock</td>
</tr>
<tr>
<td>Victoria</td>
<td></td>
</tr>
</tbody>
</table>

Volumetric loading is permitted in South Australia and Victoria for some combination types, but not road trains.

More information is available on the NHVR website at www.nhvr.gov.au and on state and territory road agency websites.

Some specific requirements apply to operating livestock transport road trains in New South Wales. In some instances, A-doubles must be fitted with a tri-axle converter dolly. Details are published on Transport for New South Wales’ road train access maps (see the Approved routes section of this guide).

Commodity transport in South Australia

Dedicated road networks for road trains carrying certain commodities are available in South Australia. These networks provide additional access, beyond that for the same combinations carrying goods other than the specified commodities.

Road trains eligible to operate on the South Australian commodity networks are:

- A-doubles up to 36.5m long
- B-triples up to 36.5m long (including modular B-triples up to 35.0m long)
- rigid trucks towing two trailers up to 36.5m long.

Detailed information on local conditions for commodity-carrying road trains in South Australia is available on the South Australian RAVNet Online Map system at www.dpti.sa.gov.au/ravnet.

Vehicle carriers

Road trains used to carry vehicles may operate under the Notice. Vehicle carrier road trains may be up to 4.6m high if built with more than one deck.

Mass requirements

The default mass limits are the General Mass Limits (GML). A summary of mass requirements is available on the NHVR website at www.nhvr.gov.au/road-access/mass-dimension-and-loading. These include mass limits:

- specified by the vehicle manufacturer
- for individual axles and axle groups
- for individual component vehicles and trailers
- for the combination as a whole
- as determined by axle spacing (Appendix 1).

Road trains may also load to Concessional Mass Limits (CML). The standard requirements for CML apply, including for operators to be accredited under the National Heavy Vehicle Accreditation Scheme (NHVAS) Mass Management module.

Road train operators may operate under Higher Mass Limits (HML). When loaded under HML, operators may only access roads approved under both this Notice and for HML. This means that more restricted access applies when operating at HML than at GML or CML.

More information can be found at:


Axle groups and mass limits

Table 3 shows the maximum mass allowable on an axle or axle group.

All of the axle group types listed in Table 2 are allowed on road trains operating under the Notice, except:

- tri-axle drive groups – prohibited on any road trains operating under the Notice
- quad-axle groups – prohibited on any road trains operating under the Notice and when on state-controlled roads in Queensland only.

Axle mass spacing limits

In addition to complying with the mass and dimension requirements, road trains must comply with the axle spacing mass limits included in Appendix 1.

Figure 2 shows an example of the axle spacing requirements and mass limits for a 36.5m A-double.
Table 5 specifies road train axle spacing mass limits. The distance between axle groups determines the maximum allowable mass over those axle groups.

### Table 3: Mass limits for single axles and axle groups

<table>
<thead>
<tr>
<th>Axle/s</th>
<th>Axle group/tyres</th>
<th>Axle/vehicle requirements</th>
<th>Tyre section width</th>
<th>Mass limit (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>GML</td>
<td>CML</td>
</tr>
<tr>
<td>Steer</td>
<td></td>
<td>default limit</td>
<td>n/a</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>complying steer</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>axle vehicle</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n/a</td>
<td>295-375 mm</td>
<td>6.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n/a</td>
<td>at least 375 mm</td>
<td>7.1</td>
</tr>
<tr>
<td>Single</td>
<td></td>
<td>single tyres</td>
<td>less than 375 mm</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>375-450 mm</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>at least 450 mm</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dual tyres</td>
<td>n/a</td>
<td>9.0</td>
</tr>
<tr>
<td>Twin-steer</td>
<td></td>
<td>non load-sharing</td>
<td>n/a</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>suspension system</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

Axle/s Axle group/tyres Axle/vehicle requirements Tyre section width Mass limit (t)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>GML</th>
<th>CML</th>
<th>HML</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tandem</td>
<td></td>
<td>single tyres on all axles</td>
<td>less than 375 mm</td>
<td>11.0</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>375-450 mm</td>
<td>13.3</td>
<td>13.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>at least 450 mm</td>
<td>14.0</td>
<td>14.5</td>
</tr>
</tbody>
</table>

- **Quad-axle³**: single tyres on one axle and dual tyres on the other axle
  - n/a | 13.0 | 13.5 | 14.0

- **Tandem axle group³**: dual tyres on all axles
  - n/a | 16.5 | 17.0

- **Tri-axle group**: single tyres on all axles
  - a combination of single and dual tyres
    - n/a | 15.0 | 15.5 | 15.0

- **Tri-axle group**: single tyres on all axles
  - a combination of single and dual tyres
    - n/a | 20.0 | 21.0 | 22.5

- **Quad-axle³**: single tyres on all axles
  - dual tyres on all axles
    - n/a | 20.0

- **Quad-axle³**: dual tyres on all axles
  - n/a | 20.0

### Local mass requirements

The mass requirements under the Heavy Vehicle (Mass, Dimension and Loading) National Regulation and described—GML, CML, and HML—determine whether a road train is eligible to operate under the Notice (at all).

Operators must also comply with local mass requirements. These are as shown on the maps detailing road train access. These local requirements reflect limitations of specific road infrastructure (e.g. a bridge load limit).

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³ Tri-axles cannot be used as the drive axle group.
⁴ HML (22.5t) is unavailable for single-tyred tri-axle groups when operating on roads in Victoria.
⁵ Quad axles prohibited when operating on state-controlled roads in Queensland.
Dimension requirements
Road trains must meet the dimension requirements as prescribed in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation. These are mostly the same requirements as those that apply to non-road trains, including a width limit of 2.5m and a default height limit of 4.3m (or 4.6m for livestock and car carrying vehicles, and B-triples meeting certain conditions).

There are some dimension requirements specific to road trains under the Notice, particularly the length limits for each eligible road train combination type as shown in Table 1.

Warning signs
Road trains longer than 22m, but not longer than 30m, must display a long vehicle warning sign at their rear (as shown in Figure 3).

![Figure 3 Example of a long vehicle sign](image)

Figure 3 Example of a long vehicle sign
Road trains longer than 30m must display a road train warning sign at the front and rear of the combination (as shown in Figure 4).

![Figure 4 Example of a road train sign](image)

Figure 4 Example of a road train sign

Braking requirements
Most braking system requirements are made by the Australian Design Rule (ADR) to which the vehicle was constructed. A road train must continue to comply with those requirements.

The Heavy Vehicle (Vehicle Standards) National Regulation makes some additional requirements that apply to road train combinations. These include ensuring there is sufficient air pressure available in the braking system.

The following additional braking requirements apply in New South Wales:

- The prime mover of a B-triple or AB-triple must be fitted with an anti-lock braking system (ABS) complying with third edition ADR 64.
- A tank trailer forming part of any heavy vehicle combination and used to transport specified dangerous goods must be fitted with an electronic roll-over control system.

These requirements apply to heavy vehicles, irrespective of when they were built.

The ADRs have also mandated:

- anti-lock braking systems to be fitted on prime movers built from 1 January 2015
- vehicle stability control to be fitted on prime movers built from 1 July 2020
- rollover control systems to be fitted on heavy trailers built from 1 November 2019.

The ADRs requirements apply to heavy vehicles operating in any state or territory of Australia.

Mechanical couplings and ratings
Mechanical couplings are the devices that connect one component vehicle of a combination to another. They include:

- fifth wheels, king pins and turntables
- pin-type couplings and drawbar eyes on converter dolly couplings.

Eligible road trains are defined in the Notice partly by the types of mechanical couplings with which they are fitted. A key difference between coupling types is their capacity to resist roll between the connected vehicles.

- Fifth wheel assemblies that utilise two rotating plates are considered to be roll-coupled connections.
- Pin-type couplings and drawbar eyes—a feature of converter dollies—are not considered to be roll-coupled. The pin-type connection to the towing (forward) vehicle offers lesser resistance to roll.

Table 4: Key road train trailer coupling strength requirements of ADR 63/00

<table>
<thead>
<tr>
<th>Coupling type</th>
<th>Relevant Australian Standard</th>
<th>Minimum D-value (kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifth wheel assembly</td>
<td>1773-1990 Articulated Vehicles-Fifth Wheel Assemblies</td>
<td>162</td>
</tr>
<tr>
<td>Fifth wheel kingpins</td>
<td>2175-1990 Articulated Vehicles - Kingpins</td>
<td>162</td>
</tr>
<tr>
<td>Pin-type couplings and drawbar eyes</td>
<td>2213-1984 50mm Pin-Type Couplings and Drawbar Eyes for Trailers</td>
<td>186</td>
</tr>
</tbody>
</table>

All road train trailers built from July 1991 onwards must comply with Australian Design Rule 63/00 – Trailers Designed for Use in Road Trains. ADR 63 requires that they be equipped with mechanical couplings meeting the standards and strength requirements shown in Table 4.

For road train trailers built before July 1991 and not subject to ADR 63/00, requirements made in the Heavy Vehicle (Vehicle Standards) National Regulation apply. Those include complying with the following Australasian Standards and updated/later versions of these:

- AS 2175-1990: Articulated Vehicles – Kingpins
- AS 2213-1984: 50mm Pin-Type Couplings and Drawbar Eyes for Trailers

These Australasian Standards describe a method to, and require operators to, calculate coupling strength requirements (minimum D-values). Example calculations are shown in Table 5. Alternatively, values no less than those required by ADR 63/00 and shown in Table 4 are acceptable.

Table 5: Examples of minimum coupling strength values calculated via the Australian Standards

<table>
<thead>
<tr>
<th>Combination type</th>
<th>Dolly converter</th>
<th>Minimum D-value (kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid truck towing two trailers</td>
<td>Tandem axle</td>
<td>124</td>
</tr>
<tr>
<td>A-double</td>
<td>Tandem axle</td>
<td>128</td>
</tr>
<tr>
<td>A-triple</td>
<td>Tri-axle</td>
<td>172</td>
</tr>
</tbody>
</table>

Approved routes

Road trains may access the routes authorised under the Notice. Approved routes are a combination of areas (all roads within a defined area) and specific roads. These are described on maps published by each state government. Maps are available as follows.

New South Wales


Queensland

qldglobe.info.qld.gov.au/?topic=heavy-vehicle-routes-and-restrictions

The below excerpt from the Queensland Globe (Figure 5) shows approved heavy vehicle routes in Queensland. When accessing the map in Queensland Globe, the legend can be expanded by clicking on the arrow that appears on the right-hand side of the screen.

- Blue roads (designated ‘RT1 route’) show roads approved for access by Type 1 road trains.
- Pink roads (designated ‘RT2 route’) show roads approved for access by both Type 1 and Type 2 road trains.

Figure 5 Excerpt from the Queensland Globe showing approved road train routes.

The Queensland Globe shows restrictions on road train routes. These are visible by zooming in on sections of approved routes on which restrictions apply. A restriction example is shown in Figure 6. It is signified by the blue dot at the road intersection.

Information on the restriction is viewed by clicking on the:

- blue/white spanner icon
- identify icon that appears on the toolbar
- route restriction, where displayed on the map
• restriction menu item from the panel that appears on the left of screen
• restriction item(s) that appear on the menu panel for information on the restriction’s nature.

South Australia

www.dpti.sa.gov.au/ravnet

Select the type of road train routes you are seeking to access from the menu on the left of screen, choosing from:

- GML routes
- HML routes
- Commodity routes [road train]

The selected routes are displayed on the screen. Approved roads are represented by black lines. Network restrictions are indicated by red dots with white crosses and green stars for level crossing restrictions. Click on the dots and stars to display the restriction.

South Australia has provided routes for road trains transporting specific commodity types. The routes provide additional access beyond those available for general road train operation. They are available at GML and CML only.

Commodity routes are represented by blue lines. Orange borders designate local government boundaries. Printing the map will produce a list of local government restrictions not visible on the interactive map.

Victoria

The Victorian road train network is available on the VicRoads webpage. Figure 7 shows an excerpt of the road train map for Victoria. Operators can click on:

- the menu icon (shown as the middle icon at the top right of Figure 7) for a map legend
- an approved road for information on that road
- a restriction (yellow dot) for information on that the restriction.

Figure 7 Excerpt of the maps showing approved routes and restrictions in Victoria.

Each of the Victorian maps displays:

- approved routes of operation for eligible road trains
- any conditions and restrictions applicable to a given route

All of the routes allow operation of road trains at GML and CML. Operators must still comply with any mass restrictions (e.g. as applies on a specific road).

HML-approved routes comprise those parts of the default (GML) road train network assessed as having sufficient capacity to support the additional mass. There was no HML access for road trains operating in Victoria at the time of writing.
**Speed limits**

Road trains must be operated in accordance with the speed limits applying on a given road.

Road trains are restricted to the lesser of an absolute maximum speed and the applicable speed limit on a given road. The absolute maximums are summarised in Table 6.

### Table 6: Summary of road train absolute maximum speed limits

<table>
<thead>
<tr>
<th>State or territory</th>
<th>Maximum speed limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>90 km/h</td>
</tr>
<tr>
<td>Queensland</td>
<td>90 km/h</td>
</tr>
<tr>
<td>South Australia</td>
<td>100 km/h On the:</td>
</tr>
<tr>
<td></td>
<td>• Eyre Highway - west of Port Augusta</td>
</tr>
<tr>
<td></td>
<td>• Sturt Highway, north of Port Augusta</td>
</tr>
<tr>
<td></td>
<td>90 km/h On any other road in SA</td>
</tr>
<tr>
<td>Victoria</td>
<td>90 km/h</td>
</tr>
</tbody>
</table>

An information sheet on road train speed limits is available on the NHVR website.

Road trains must also be limited (i.e. mechanically, electronically or otherwise) to be incapable of exceeding 100 km/h.

**Conditions applying to road trains in individual states**

As much as possible, road train requirements nationally have been made uniform. However, it has been necessary to retain some state-specific conditions. These conditions apply to road trains operating on any and all roads within a given state.

**New South Wales**

- Prime movers forming part of B-triple and AB-triple combinations must be equipped with ABS brakes.

**Queensland**

- Quad-axle groups must not be fitted on any road trains while operating on state-controlled roads in Queensland only.

**South Australia**

- Operators of road trains registered in South Australia must⁷:
  - be accredited in the NHVAS Maintenance Management module, or
  - display a valid inspection label on their road train that was issued by the South Australia Department of Planning, Transport and Infrastructure (DPTI).

**Victoria**

- Nil.

Additional conditions to those described above apply to road train operation on a road-by-road basis. These are described on the individual roads as displayed on the maps for road train access.

**NHVAS accreditation**

The circumstances in which operators utilising the Notice must be accredited under the NHVAS have been reduced.

Operators of road trains registered in South Australia have the option to participate in the NHVAS Maintenance Management module as an alternative to displaying a valid inspection label. This condition reflects requirements of the South Australian Government’s Heavy Vehicle Inspection Scheme.

Operators seeking to load a road train to CML or HML⁸ must participate in the NHVAS Mass Management module. This is a standing requirement under the Heavy Vehicle National Law (HVNL).

**Requirement to carry the Notice or Operator’s Guide**

Drivers do not need to carry a copy of the Notice or Operator’s Guide.

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⁷ The requirement does not apply to road trains visiting, but not registered in South Australia.

⁸ NHVAS Mass Management is only required when a vehicle is being loaded to CML or a tri-axle group to HML.
Appendix 1: Axle spacing mass limits

The axle spacing mass limits shown in Table 5 are as prescribed in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation.

Table 5: Restricted access axle spacing mass limits

<table>
<thead>
<tr>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
<th>Length of axle spacing (m)</th>
<th>Mass Limit (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 20.8</td>
<td>10.0</td>
<td>At least 23.2</td>
<td>12.8</td>
<td>At least 25.7</td>
<td>15.0</td>
<td>At least 27.8</td>
<td>17.0</td>
<td>At least 29.0</td>
<td>19.0</td>
<td>At least 30.3</td>
<td>21.0</td>
</tr>
<tr>
<td>Less than 20.8</td>
<td>10.0</td>
<td>Less than 23.2</td>
<td>12.8</td>
<td>Less than 25.7</td>
<td>15.0</td>
<td>Less than 27.8</td>
<td>17.0</td>
<td>Less than 29.0</td>
<td>19.0</td>
<td>Less than 30.3</td>
<td>21.0</td>
</tr>
</tbody>
</table>

Note: The table continues with similar entries for other mass limits and axle spacings.
Appendix 2: Definitions

The road trains authorised to operate under the Notice are defined in Table 6 below.

Table 6 Authorised road train combinations

<table>
<thead>
<tr>
<th>Combination</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-double</td>
<td>A prime mover towing a semitrailer towing another semitrailer connected by a converter dolly.</td>
</tr>
<tr>
<td>A-triple</td>
<td>A prime mover towing three semitrailers. The second and third semitrailers are each connected by a converter dolly.</td>
</tr>
<tr>
<td>AB-triple</td>
<td>A prime mover towing three semitrailers. The second semitrailer is connected by a converter dolly and the third trailer is connected by a fifth wheel located towards the rear of the preceding semitrailer. Can also be described as a semitrailer towing a B-double using a converter dolly.</td>
</tr>
<tr>
<td>ABB-quad</td>
<td>A prime mover towing four semitrailers. The third and fourth semitrailers are connected by a fifth wheel located towards the rear of the preceding semitrailer, and the second semitrailer is connected by a converter dolly. Can also be described as a semitrailer towing a B-triple using a converter dolly.</td>
</tr>
<tr>
<td>B-triple</td>
<td>B-triple means a combination consisting of a prime mover towing three semitrailers, with—(a) the first semitrailer being attached directly to the prime mover by a fifth wheel coupling; and (b) the second semitrailer being mounted on the rear of the first semitrailer by a fifth wheel coupling on the first semitrailer; and (c) the third semitrailer being mounted on the rear of the second semitrailer by a fifth wheel coupling on the second semitrailer.</td>
</tr>
</tbody>
</table>

Table 7 Other definitions

<table>
<thead>
<tr>
<th>Combination</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complying steer axle vehicle</td>
<td>A road train with a single steer axle is a complying steer axle vehicle, if the vehicle has all of the following:</td>
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<tr>
<td></td>
<td>• an engine complying with the emission control requirements contained in ADR 80/01 (Euro IV engine) or a later version of ADR 80</td>
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<td>• a front underrun protection device that complies with UN ECE Regulation No. 93 or ADR 84 – Front Underrun Impact Protection</td>
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<td>• a cabin that complies with UN ECE Regulation No. 29</td>
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<td></td>
<td>• appropriately rated tyres, axle and suspension to permit 6.5 tonnes on the steer axle</td>
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<td></td>
<td>• a gross vehicle mass (GVM) of 15 tonnes or more.</td>
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</tbody>
</table>

D-value | D-value is a measure of a mechanical coupling’s strength capacity. These values are calculated using methods described in relevant Australasian Standards. The Australasian Standards require a D-value to be permanently marked on a mechanical coupling by its manufacturer. Operators must ensure their road train’s couplings have a sufficient D-value, as required by the Heavy Vehicle (Vehicle Standards) National Regulation. |

Heavy Vehicle (Vehicle Standards) National Regulation | This Regulation is made under the HVNL and prescribes the vehicle standards with which a single heavy vehicle or heavy combination must comply for its use on a road. |