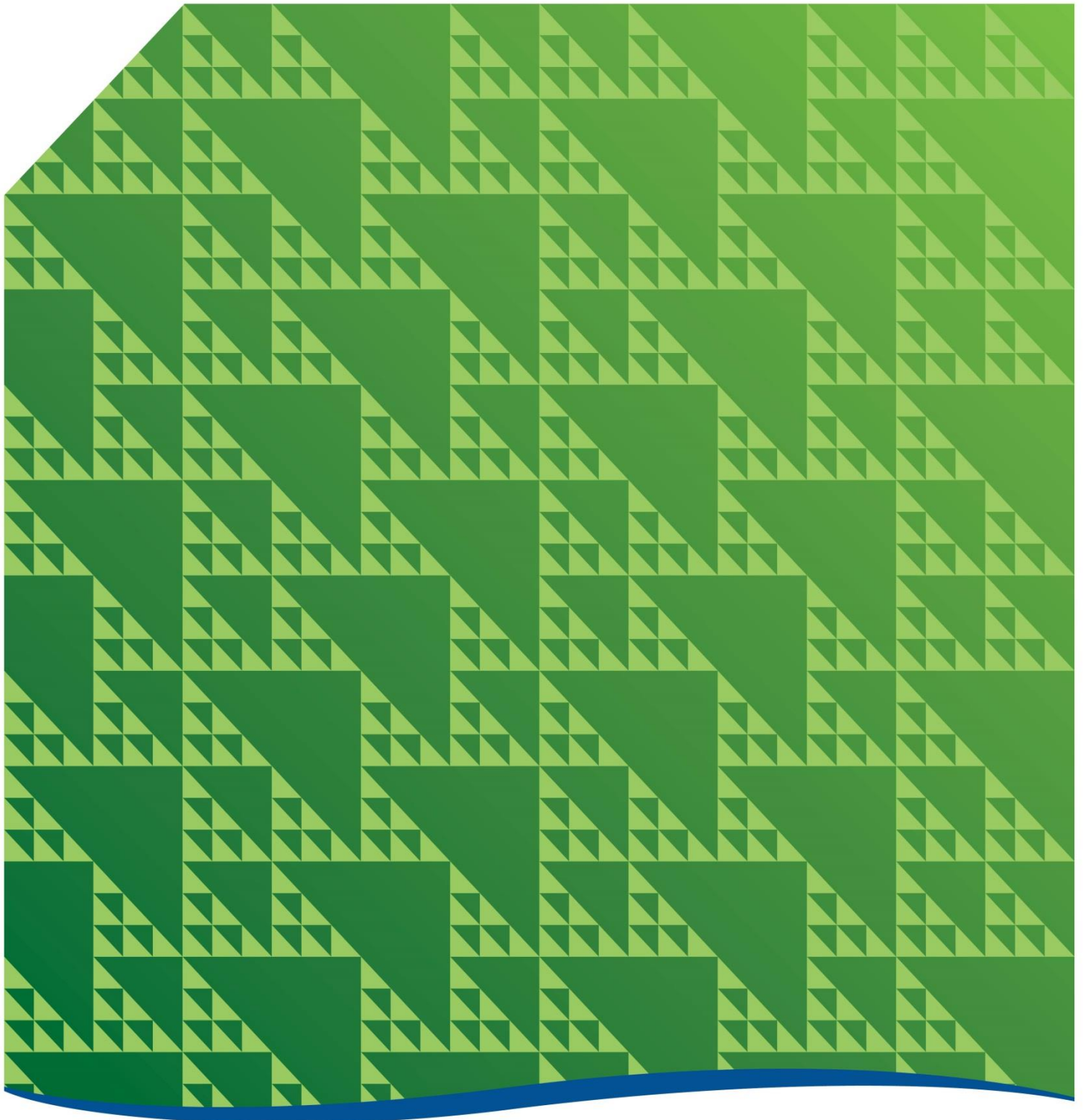


Performance Based
Standards (PBS) Scheme Heavy
Vehicles

Reviewed: September 2014

State Road Access Policy



The Performance Based Standards Scheme for Heavy Vehicles

The Performance Based Standards (PBS) Scheme provides heavy vehicle designers and freight logistics operators greater flexibility with respect to the mass, dimension and possible vehicle combinations (trucks carrying one or more trailers) that is available under prescriptive mass and dimension standards such as the Australian Design Rules.

The PBS Scheme is one option available to road managers, industry and freight logistics operators to improve the productivity of freight transport through better matching of heavy vehicles to the freight task.

The PBS Scheme is administered nationally by the National Heavy Vehicle Regulator (NHVR). PBS vehicles are defined as a Class 2 Heavy Vehicle under the Heavy Vehicle National Law. While PBS vehicle designs and route authorisations are coordinated by the NHVR, very early consultation with State and Local Government road managers in relation to network access is strongly recommended by the NHVR and the State road authority (see Tasmanian State Road Network Access section below).

Vehicles Approved under the Performance Based Standards Scheme

The introduction of the PBS Scheme is part of the national approach towards improved freight productivity and road safety. PBS vehicles are expected to have better handling and safety over non-PBS vehicles and are also expected to have lower fuel consumption and exhaust emissions.

PBS vehicle designs are assessed by the PBS Review Panel, which determines whether a design meets the infrastructure and safety standards and nominates any national operating conditions that are to apply. This ensures that a vehicle's performance is matched to its level of road network access. The PBS Review Panel is also responsible for accrediting third-party assessors and vehicle certifiers on the recommendation of State and Territory road authorities.

Although the PBS Scheme provides flexibility for vehicle operators and manufacturers to design specific vehicles for different freight tasks, some vehicle specifications such as maximum allowable lengths and axle masses do exist.

Existing axle group mass limits continue to apply under the PBS Scheme (i.e. General Mass Limits, Concessional Mass Limits and Higher Mass Limits). However, above PBS Level 1, vehicle gross mass is not explicitly limited. The flexibility of the PBS Scheme is that it allows the design of innovative heavy vehicle features such as more points of articulation or a novel distribution of axles compared to that allowed by prescriptive vehicle design standards.

Increased design flexibility does mean that there is a possibility that some PBS vehicles will cause unacceptable rates of road pavement deterioration or endanger vulnerable assets. The PBS Scheme anticipates the introduction of a heavy vehicle pricing scheme that can recover the additional infrastructure costs incurred in these cases. However, in the interim, road managers may choose not to give consent to network access by certain PBS vehicle designs.

Tasmanian State Road Network Access

A key objective of the PBS Scheme is that vehicles are matched to appropriate road networks.

Four PBS networks have been defined by the National Transport Commission, roughly equating to conventional heavy vehicle networks for: general access heavy vehicles; high productivity vehicles such as B-doubles up to 30 metres in length; Type I road trains; and Type II road trains. Network subcategories (denoted with an “A”) for shorter vehicles are available for PBS Levels 2-4 (refer Table 1 below).

PBS Road Network	Network Access by Vehicle Length (L)	Closest Present Vehicle Description
Level 1	$L \leq 20\text{m}$	Rigid truck, semi-trailer
Level 2A	$L \leq 26\text{m}$	21-30 metre B-double
Level 2B	$26\text{m} < L \leq 30\text{m}$	
Level 3A	$L \leq 36.5\text{m}$	Double road train (Type I)
Level 3B	$36.5\text{m} < L \leq 42\text{m}$	
Level 4A	$L \leq 53.5\text{m}$	Triple road train (Type II)
Level 4B	$53.5\text{m} < L \leq 60\text{m}$	

Table 1: PBS road network classifications

The Tasmanian State road authority has approved a PBS Level 1 network and a PBS Level 2A network. No PBS Level 2B, Level 3 or Level 4 networks have currently been approved for State roads.

The State road authority will consider providing road manager consent for PBS 2A vehicles to operate for defined periods on specific High Productivity Vehicle routes outside the PBS Level 2A network specified in this Policy (refer Figure 1 below).

PBS Level 1 access is available for all State roads subject to Tier 2 or Tier 3 bridge loading assessments if required and compliance with the Austroads *Pavement Wear Assessment Method for PBS Vehicles* (see below).

PBS Level 2A access for State roads is shown in Figure 1 below subject to Tier 2 or Tier 3 bridge loading assessments if required and compliance with the Austroads *Pavement Wear Assessment Method for PBS Vehicles* (see below).

The Tasmanian State road PBS Level 2A network specified in this Policy will be reviewed annually at the end of each financial year to evaluate opportunities to improve PBS Level 2A access through extensions to the network.

The Tasmanian State road PBS Level 1 and Level 2A networks assume compliance with a Tier 1 bridge loading assessment under the *PBS Scheme - Standards and Vehicle Assessment Rules*. Tier 2 and Tier 3 bridge loading assessments are required to be undertaken by the Tasmanian State road authority (see Contacts section below).

To be granted access to the State road network, PBS vehicles should comply with the Austroads *Pavement Wear Assessment Method for PBS Vehicles*. As provided for in the Pavement Vertical Loading Standard in the *PBS Scheme - Standards and Vehicle Assessment Rules*, the State road authority is unlikely to provide consent for State road network access for PBS vehicle designs that do not comply with the Austroads *Pavement Wear Assessment Method for PBS Vehicles*.

The State road authority may consider entering into a road-user agreement with an operator seeking access for a PBS vehicle that does not comply with the Austroads *Pavement Wear Assessment Method for PBS Vehicles* for a specific freight task on a defined route. Consistent with the *PBS Scheme - Standards and Vehicle Assessment Rules*, this is an interim measure until a broad-based heavy vehicle pricing regime that fully recovers the cost of excessive pavement wear is operational.

The NHVR's *PBS Application Guideline* outlines the steps to apply for a vehicle's inclusion in the PBS Scheme. It is important to note that **the first step in the PBS vehicle design approval process is to contact the relevant road manager to discuss network access**. Applicants that do not follow this process risk having a vehicle design approved by the PBS Review Panel that is unable to access the State road network and/or Local Government roads. Contact details for the State road authority are provided in the Contacts section below.

Local Government Road Access

Local Government road managers are responsible for approving access for PBS vehicles to their roads. Businesses and heavy vehicle operators who wish to design or use a PBS vehicle for use on Local Government roads should discuss their requirements directly with the relevant Local Government(s).

An internet link to Tasmanian Local Government contacts is provided in the Contacts section below.

Applying for Access

The NHVR coordinates PBS network access approval processes for all Tasmanian road managers, including facilitation of PBS design approvals.

Contact details for the NHVR are provided in the Contacts section below.

Other Access Conditions

National vehicle operating conditions may apply for certain PBS vehicles.

The Tasmanian State road authority will require PBS Level 2A vehicles that have consent to operate at mass limits in excess of Higher Mass Limit axle loads to be remotely monitored for route and potentially mass compliance. This may be achieved with telemetry equipment such as that available through the Intelligent Access Program once a State road authority Heavy Vehicle Mass Management Policy has been implemented. This requirement is to ensure that vehicle operation complies with State road access conditions in the interests of infrastructure sustainability and public safety.

Additional access conditions may be determined on a case by case basis.

Figure 1: PBS Level 2A network for Tasmanian State roads



Contacts:*Access Applications:*

National Heavy Vehicle Regulator (NHVR)

PO Box 492

Fortitude Valley QLD 4006

Email: info@nhvr.gov.au

Phone: 1300 696 487

Fax: 07 3309 8777

Website: <https://www.nhvr.gov.au/road-access/performance-based-standards>

Tasmanian State Road Authority:

Department of State Growth

Transport Infrastructure Services Division

GPO Box 536

Hobart TAS 7001

Email: info@stategrowth.tas.gov.au

Phone: 1300 851 225

Website: <http://www.transport.tas.gov.au>

Local Government:

Contact details for Tasmanian Local Governments are provided on the Local Government Association of Tasmania website:

<http://www.lgat.tas.gov.au>.

Useful Documents:

Heavy Vehicle National Law (Parliament of Queensland)

<https://www.nhvr.gov.au/law-policies/heavy-vehicle-national-law-hvnl>

PBS Application Guideline (National Heavy Vehicle Regulator)

<https://www.nhvr.gov.au/files/resources/0022-pbsapplicationline.pdf>

PBS Scheme - Standards and Vehicle Assessment Rules (National Transport Commission)

<https://www.nhvr.gov.au/files/resources/0020-pbsstdsvehassrules.pdf>

Pavement Wear Assessment Method for PBS Vehicles (Austroads)

<https://www.onlinepublications.austroads.com.au/items/AP-R372-11>