



How Australia reformed its heavy-vehicle access rules

Australia can claim to be the world leader in allowing access of high-productivity heavy vehicles onto public roads. A milestone was reached recently when VicRoads released a bulletin setting out the conditions for 30m A-double access to the Victorian level 2B Performance-Based Standards (PBS) B-double road network. This follows a previous bulletin concerning access by 30m 85.5t A-doubles on the more restrictive HPFV network. I want to describe the 25-year reform history that has led to these significant developments. Of course the other large mainland states will regard the Victorian development as ho-hum, but the significance is that Victoria was initially a most-reluctant participant in road access for B-doubles. It is a relatively small state with higher traffic densities than all the others. Twenty-five years ago, a strident campaign against 'monster trucks' was being waged in Victorian newspapers. This time, not a whisper. So how have Victoria and the rest of Australia satisfied community concerns and been able to reform road access rules? First some history. The list opposite is my choice of the significant steps that Australia has made to reform its heavy-vehicle sector. Some of this history comes from Bob Pearson's excellent book¹. The B-double trial process took nearly a decade before B-doubles were normalised. The community concerns had to be

steadily answered by demonstrated safe performance. In contrast, the PBS scheme has provided a framework in which the safety of novel vehicle types can be studied systematically and quickly. This has been crucial in providing road agencies confidence that the novel vehicle types will be safe and effective. A crucial aspect of Australia's successful adoption of PBS standards is the classification of roads into four main access levels. Different performance limits for many of the PBS criteria are applied to each access level. Vehicles accredited for any access level can travel on roads classified for that access level and higher. For example, vehicles with general access can also travel on access level four roads, but not vice versa. Access level one – general access – include main roads in urban areas, but may not include local roads. The PBS scheme (or any other high-productivity vehicle scheme) would be unacceptable to the community without a strictly applied access regime. A second crucial aspect has been the safety performance of high-productivity vehicles, mainly B-doubles, which has been better than that of semi-trailers when compared one for one. Additionally, fewer high-productivity vehicles have been needed for a given freight task, meaning less exposure to accident. A recent scholarly study concluded: "The combined total of serious and major accidents for high-productivity vehicles is 75 per cent below the combined

serious and major accident levels for conventional rigid and articulated trucks on a per-100-million-kilometre basis²." Note that this crash rate is not normalised by the weight or volume of freight carried, it is a real reduction in crash numbers. The third crucial aspect is that authorities have demanded additional safety features as a trade off for the productivity improvement. The Victorian notice for access to the 2B road network requires vehicles have (i) PBS certification, (ii) a GPS monitor that is accredited under the Intelligent Access Program (IAP) and therefore certified by Transport Certification Australia (TCA), and (iii) mass management under the National Heavy Vehicle Accreditation Scheme (NHVAS). These are substantial requirements for operators. Only operators with sufficient resources and organisation structure could consider having such vehicles. A final crucial aspect that is not written into regulation is that operators need to make money by running high-productivity vehicles. Obviously the productivity per driver is increased, however the equipment costs and compliance costs are high and this needs to be paid for by decent cartage rates and profit per vehicle. I urge government to recognise the great achievements of the industry in reaching these productivity and safety milestones that are world class. As a community we should be proud of the reform outcomes

of the industry working collaboratively with the National Road Transport Commission (NRTC)/National Transport Commission (NTC), AustRoads and TCA. The industry is delivering increased safety, productivity and fuel economy per tonne-kilometre. Government needs to look favourably on an industry that is delivering.

It seems appropriate to end with a quote from the editorial in *The Age* newspaper on Monday, 4 July 1988: "Let us say no to the juggernauts." Fortunately for our community, the people who mattered took no notice. Dr Peter Hart
Chairman
ARTSA

1. *B-doubles: The First Decade in Australia: A personal perspective.* Bob Pearson. Prime Creative Media (2009).
2. *What are the benefits of Australian high productivity vehicles when compared to the conventional heavy vehicle fleet?* Kim Hassall and Russell Thompson. *Transport Research Procedia* Vol. 12 (2016), pp874 885.

Year	Development	Who and how
1983	Road train A-triples prevalent out of Perth.	Western Australia.
1983	First trials of a B-double. Temples Transport. 8 axle, 58.5t.	Western Australia.
1984	First eastern-seaboard trial of a B-double.	Murray Goulburn, Victoria.
1984	Road train A-double weights to 70t. B-double weights to 60t.	Western Australia and Northern Territory.
1985	Review of Vehicle Mass Limits (RORVAL). Recommended 23m length for B-doubles.	National review/recommendation.
1985	Permit length for B-doubles to 18m. Significant trial.	Western Australia.
1985 – 1990	B-double trials.	All states. Various limits.
1989	Introduction of the third-edition Australian Design Rules (ADRs).	Federal and state governments acting cooperatively.
1989 – 1991	Significant public controversy. Campaigns against 'monster trucks' – focused on B-doubles.	Newspapers in Victoria.
1991	Federal legislation allows 23m B-doubles to operate under Federal Interstate Registration Scheme (FIRS).	Federal Government. Technical standards for national B-doubles published
1992	Establishment of National Road Transport Commission (NRTC).	State and federal governments (Council of Australian Governments, COAG)
1994	Achievement of B-double routes in all Australian jurisdictions.	Tasmania introduces B-double routes.
1999	Technical standards for road-friendly suspensions (RFS) released (VSB 11).	Australian Motor Vehicle Certification Board (AMVCB).
2000	NRTC starts initiates work on Performance-Based Standards (PBS).	NRTC reform project.
2003	Intelligent Access Program (IAP) established.	Austrroads.
2004	Road assessment guidelines for PBS released.	National Transport Commission (NTC) excluding NRTC.
2005	Ministers agree to allow 26m B-double lengths at 70t. Additional length facilitates longer prime mover.	All jurisdictions.
2006	Higher mass limits available under conditions, including RFS.	Various jurisdictions, including New South Wales.
2007	PBS technical standards published.	NTC.
2007	Quad semi-trailer, quad B-double, B-triple blueprint vehicles released	NTC.
2010+	Introduction of novel road train types, AB-triple and BAB quad.	Road train states and territories.
2010	Agreement to establish the National Heavy Vehicle Regulator (NHVR).	Agreement of COAG.
2012	National Heavy Vehicle Law (NHVL) Act is passed by Queensland parliament.	Queensland.
2012	COAG agrees to modular B-triple technical standards and to allow B-triples on Type 1 road train routes.	NTC and COAG.
2013	20m semi-trailer PBS blueprint project	NTC.
2013	PBS scheme is now administered by the NHVR. Final Practice-Ready Papers (PRP) committee meeting.	NHVR.
2014	NHVR starts operations as national regulator.	All jurisdictions except Western Australia and Northern Territory.
2016	National notice issued for Class 2 PBS Level 1 and 2A Truck and Dog Trailer Authorisation. National network established – a direct outcome of PBS.	NHVR.
2017	Victoria releases two significant bulletins: PBS Level 2B Network (Cubic) and High-Productivity Freight Vehicles (HPFV) network for 30m 85.5t A-doubles.	VicRoads.