

Vehicle Standard (Australian Design Rule 35/02 – Commercial Vehicle Brake Systems) 2007

Made under section 7 of the Motor Vehicle Standards Act 1989

Explanatory Statement

Issued by the authority of the Minister for Transport and
Regional Service

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1. LEGISLATIVE CONTEXT

Vehicle Standard (Australian Design Rule 35/02 — Commercial Vehicle Brake Systems) 2007 is made under the *Motor Vehicle Standards Act 1989* (the Act). The Act enables the Australian Government to establish nationally uniform standards for road vehicles when they are first supplied to the market in Australia. The Act applies to such vehicles whether they are manufactured in Australia or are imported as new or second hand vehicles.

The making of the vehicle standards necessary for the Act's effective operation is provided for in section 7 which empowers the Minister to "determine vehicle standards for road vehicles or vehicle components".

Australian Design Rule (ADR) 35/02 is being made to replace ADR 35/01, which was originally determined in *Road Vehicle (National Standards) Determination 3 of 1996*, amended in one subsequent Determination and then remade to comply with the requirements of the *Legislative Instruments Act 2003* (LIA). It is necessary to make a new standard rather than an amendment as the text as last determined has been substantially altered.

Vehicle Standard (Australian Design Rule 35/02 – Commercial Vehicle Brake Systems) 2007 is being made under the Australian Design Rule review program as part of a heavy vehicle package which includes commercial vehicle braking, trailer braking and towing equipment (for all vehicles). The prime objectives of the review are to preserve or improve Australia's road safety performance while minimising compliance costs to industry, harmonising with international standards where possible and reflecting the best current operating practices in industry.

2. CONTENT AND EFFECT OF ADR 35/02 - COMMERCIAL VEHICLE BRAKE SYSTEMS

2.1. Overview of the ADR

The function of this vehicle standard is to ensure safe braking for commercial vehicles and large passenger vehicles under normal and emergency conditions.

2.2 Effect of the ADR

This vehicle standard is being made to move closer to the well-established international standard for heavy vehicle braking systems while maintaining Australia's road safety performance. It is expected that this approach will lead to a reduction in costs for both business and government in the long term. Unique Australian requirements have been removed where they have been shown to be no longer relevant or where they can now be addressed by reference to international standards instead.

In the revised ADR 35, the international standard adopted by the United Nations Economic Commission for Europe (UNECE), Regulation 13, has been recognised as an equivalent alternative standard for vehicles other than those used in road trains.

Overall, the new vehicle standard will provide for better compatibility between heavy vehicles in unladen braking performance and in their anti-lock systems, while offering improvements in the testing regime.

Table 1 details the differences between the new vehicle standard and the replaced vehicle standard.

3. CONSULTATION ARRANGEMENTS

3.1. General Consultation Arrangements

It has been longstanding practice to consult widely on proposed new or amended vehicle standards. For many years there has been active collaboration between the Federal and the State/Territory Governments, as well as consultation with industry and consumer groups. Much of the consultation takes place within institutional arrangements established for this purpose. The analysis and documentation prepared in a particular case, and the bodies consulted, depend on the degree of impact the new or amended standard is expected to have on industry or road users.

Depending on the nature of the proposed changes, consultation could involve the Technical Liaison Group (TLG), Transport Agencies Chief Executives (TACE), and the Australian Transport Council (ATC).

- TLG consists of representatives of government (Australian and State/Territory), the manufacturing and operational arms of the industry (including organisations such as the Federal Chamber of Automotive Industries and the Australian Trucking Association) and of representative organisations of consumers and road users (particularly through the Australian Automobile Association).
- TACE consists of the chief executives of Australian and State/Territory departments of transport and road vehicle administrations.
- ATC consists of the Australian, State/Territory and New Zealand ministers with responsibility for transport issues.

Editorial changes and changes to correct errors are processed by the Department of Transport and Regional Services. This approach is only used where the amendments do not vary the intent of the vehicle standard.

New standards, or significant changes that increase the stringency of existing standards, are subject to a vote by ATC Ministers. Unless disapproved by a majority of ATC Ministers, the Minister for Local Government, Territories and Roads, can then determine the new or amended standards, under the authority of the Minister for Transport and Regional Services. Proposals that are regarded as significant need to be supported by a Regulation Impact Statement meeting the requirements of the Office of Best Practice Regulation as published in the *Best Practice Regulation Handbook*.

3.2. Specific Consultation Arrangements for this Vehicle Standard

A Single Issues Working Group (SIWG) was established from TLG members, to consider proposals under the review of this vehicle standard. A final Regulatory Impact Statement (RIS) and draft ADR were released for public comment in August 2004.

A SIWG meeting was held in April 2005 to consider the issues raised during this period and these discussions were carried through to the TLG meetings in November 2005 and again in June 2006. At this latter meeting a SIWG sub-group was formed to resolve any outstanding details, with the results reported at the TLG meeting in October 2006. The draft ADR went to TACE in June 2006 and ATC in April 2007.

The RIS is attached at Appendix A.

Table 1
Differences between ADR 35/02 and 35/01

Clause	Amendment
N/A	<u>Spike test</u> - deleted.
4.1.9	<u>Load proportioning brake systems</u> – must meet the unladen performance curves in Fig 2 from UNECE R13 for all states between unladen and laden. Calculations may be used for intermediary values.
6.12	<u>Speed tolerance for testing</u> – allows tested speeds greater than those required (broadens the tolerance band).
6.15	<u>Vehicle test configuration</u> - allows an unbraked trailer to be used in a prime mover test (assists with prime mover testing).
N/A	<u>Water recovery test</u> - deleted.
7.12.6.1	<u>Actuation timing test</u> – simplified, by removing a redundant requirement for a hose connection.
7.12.6.2, 8.1	<u>Brake response times</u> – release times deleted except for road train vehicles where they apply to the coupling only and are extended out to 650 ms (from 550 ms).
7.13.1.1, 7.13.2	<u>Permit loads</u> - allows higher vehicle test masses to provide optional results for state and territory permit system.
7.14.1	<u>Vehicle test mass</u> - allows higher vehicle test masses and interpolation of test results to lighter vehicles (assists with multiple ADR category testing).
8.1, 8.1.1, 8.1.2	<u>Alternative standards</u> - allows the latest version of UNECE R13 without modification, other than for road train braking release times. Effectively allows manufacturers to certify an increased Gross Combination Mass of a UNECE R13 approved vehicle by meeting the ADR text design of exhausting the air in the supply line to the trailer. Allows Annex 18 (design requirements) to be shown to be met during an audit.
Table 2	<u>Table 2 axle group load limits</u> - raised for Road Friendly Suspensions (RFS).
App 1 1.3.1, 1.3.2.2	<u>ABS connector</u> – allows 24V to be used but requires plug markings and requires a warning device in the cabin.