

# **Vehicle Standard (Australian Design Rule 62/02 – Mechanical Connections Between Vehicles) 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

**June 2007**

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## **1. LEGISLATIVE CONTEXT**

*Vehicle Standard (Australian Design Rule 62/02 — Mechanical Connections Between Vehicles) 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) 62/02 is being made to replace ADR 62/01, which has been amended once since its initial 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 62/02 – Mechanical Connections Between Vehicles) 2007* is being made under the Australian Design Rule review program as part of a heavy vehicle package comprising ADRs 35/01, 38/02 and 62/01. 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 62/02 - MECHANICAL CONNECTIONS BETWEEN VEHICLES**

### **2.1. Overview of the ADR**

The function of this vehicle standard is to specify requirements for mechanical connections (couplings) between vehicles, to ensure positive mechanical engagement and to prohibit disengagement during use.

### **2.2 Effect of the ADR**

This vehicle standard is being made to more closely align with the international standard adopted by the United Nations Economic Commission for Europe (UNECE). This is expected to maintain Australia's road safety performance and lead to savings for both business and government in the long term. Unique Australian requirements have been removed where they were found to be no longer relevant, or where they can now be addressed by reference to international standards instead.

The international standard UNECE Regulation 55 has been recognised as an equivalent for many classes of couplings. There is more flexibility in the design and testing of towbars, drawbars and safety chains, and more relevant requirements specified for light duty fifth wheel couplings and hook couplings. Other referenced standards have also been updated.

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Overall, the new vehicle standard will allow greater flexibility in coupling, towbar and drawbar design and testing.

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.

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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 62/02 and 62/01**

Clause	Amendment
N/A	<u>Tow coupling overhang requirements</u> – deleted.
6.1, 7.1	<u>Fifth wheel and kingpin Australian Standards</u> – updated to the latest revision.
Footnotes 1, 2	<u>Coupling selection requirements</u> - references to coupling selection requirements within Australian Standards have been exempted, where the characteristics of both towing vehicle and towed vehicle must both be known (Fifth wheels and kingpins, pin couplings, hook couplings). These requirements relate to vehicle combinations only and so are unable to be certified under the ADR single vehicle certification arrangements. The strength requirements remain.
6.2, 7.2	<u>Light duty fifth wheel requirements</u> – introduced, as general requirements were not suitable.
8, 8.1	<u>Automatic pin coupling Australian Standards</u> – updated to the latest revision and reworded to allow for other than 40 and 50mm pin sizes.
9, 9.1	<u>Ball coupling Australian Standards</u> – updated to the latest revision and reworded to allow other than 50mm sizes.
11, App 1	<u>Hook couplings</u> – allows UNECE R55 couplings or have a certain 'V' and 'D' value (also see above amendment re: selection requirements). Also allows UNECE R55 dimensionally but the test requirements of an "other" coupling (as per ADR 62/01). Includes a dimensional reference in the Appendix.
12.3.2	<u>Ratings for up to 3.5 tonnes</u> – except for the types covered through the Australian Standards, couplings can now be rated at nominated intermediate ratings, rather than only at 750 kg or 3.5 tonnes.
14.3.1.2.1	<u>Safety chain</u> – allows for cable instead of chain.
14.3.1.3	<u>Safety chain breaking force</u> - must be at least equal to the Aggregate Trailer Mass rather than that specified in Table 1. The Australian Standard is updated to the latest revision.
13.3.1, 14.2.1	<u>Towbars and drawbars</u> – existing static tests now allow more discretion to reduce test forces for dog trailers and/or hinged drawbars for the vertical and transverse force requirements. The minimum forces relate to the nominated rear axle group mass of the towing vehicle or the front axle group of the trailer only (instead of only to the Aggregate Trailer Mass).
13.3.114.2.1	<u>Towbar and drawbar static tests</u> - have allowed the option of testing to the current 120 kN requirement for a worst case - but simple - alternative (was removed in the earlier drafts).
13.5.1.4	<u>Placarding requirements for towbars</u> - have been finalised to identify a basic Aggregate Trailer Mass (ATM) for other than dog trailers, based on the minimum of the horizontal, transverse and vertical loads tested to, with a higher ATM for a dog trailer and/or hinged drawbar trailer.
15	<u>Alternative standards</u> - allows UNECE R55 for a range of couplings.