

Vehicle Standard (Australian Design Rule) Mobile Crane and Other Amendments 2025

Made under section 12 of the *Road Vehicle Standards Act 2018*

Explanatory Statement

Approved by Senator the Hon Anthony Chisholm,
Assistant Minister for Regional Development

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1. LEGISLATIVE AUTHORITY

1.1. National Road Vehicle Standards

The Vehicle Standard (Australian Design Rule) Mobile Crane Amendments 2025 (“the Amending Instrument”) is made under section 12 of the *Road Vehicle Standards Act 2018* (RVSA).

The RVSA enables the Australian Government to establish nationally uniform standards that apply to new road vehicles or road vehicle components when they are provided to the market in Australia. The RVSA applies to vehicles or components whether they are manufactured in Australia or imported.

The making of the vehicle standards necessary for the RVSA’s effective operation is provided for in section 12, which empowers the Minister to “determine standards for road vehicles or road vehicle components”.

Subsection 33(3) of the *Acts Interpretation Act 1901* provides, in part, that the power to amend instruments is conferred by the same power to make the instrument.

1.2. Exemption from Sunsetting

The Australian Design Rules (ADRs) are exempt from the sunsetting provisions of the *Legislation Act 2003*.

Source of the Exemption

A standard made under section 12 of the RVSA is not subject to the sunsetting provisions of section 50 of the *Legislation Act 2003* through section 12 of the *Legislation (Exemptions and Other Matters) Regulation 2015* (table item 56C). A similar exemption was previously granted in respect of national road vehicle standards made under section 7 of the *Motor Vehicle Standards Act 1989* (MVSA) (item 40, section 12 of the *Legislation (Exemptions and Other Matters) Regulation 2015*). This exemption is important to ensure that ADRs, including those amended by the Amending Instrument, continue to remain in force and available to regulators and industry.

Intergovernmental Dependencies

The exemption concerns ADRs which facilitate the establishment and operation of the intergovernmental vehicle standard regime that Commonwealth, state and territory governments rely on to regulate the safety of vehicles on public roads.

The Commonwealth uses the ADRs as the basis on which approvals to supply types of road vehicles to the market are granted under the *Road Vehicle Standards Rules 2019*. States and territories and the National Heavy Vehicle Regulator use the ADRs as the primary criteria on which vehicles are assessed for road worthiness. This ‘in-service’ aspect is dependent on the date of manufacture, which determines the applicable version of the ADRs against which the vehicle can be assessed. The ability to rely on national standards is particularly relevant given the long service life of vehicles – the average age of vehicles in Australia is over 10 years.

While the ADRs are regularly updated to reflect changes in technology, it is not possible to apply these new standards retrospectively to vehicles that are already in use. With former ADRs kept on the Federal Register of Legislation, state and territory governments can use them to ensure vehicles continue to comply with the ADRs that were in force when they were first supplied to the market.

In the event that the Commonwealth could not justify the maintenance of the ADRs, state and territory governments would be compelled to create their own vehicle standards. Whilst this could mean adopting the substance of the lapsed ADRs as an interim measure, the differing needs and agendas of each state and territory government may result in variations to in-service regulations. Having different vehicle standards across the states and territories would make the scheme operate contrary to the underlying policy intent of the RVSA which is to set nationally consistent performance-based standards.

Commercial Dependencies

The effect on vehicle manufacturers to redesign existing models to comply with new ADRs would present a burden and be a costly and onerous exercise. Manufacturers should not be expected to continually go back to redesign existing vehicle models that are still being newly supplied to the market. Furthermore, ongoing product recalls to update vehicles to comply with new ADRs (where such an update is feasible) would undermine consumer confidence with significant financial impact to manufacturers. This exemption allows vehicle manufacturers to focus their efforts to ensure new models supplied to the market continue to comply.

Reviews of Australian Design Rules

ADRs are subject to regular reviews, as resources permit, and when developments in vehicle technology necessitates updates to requirements. Reviews of the ADRs ensure the ongoing effectiveness of a nationally consistent system of technical regulations for vehicle design, which are closely aligned, wherever appropriate with leading international standards such as United Nations (UN) regulations. This method facilitates the rapid introduction of the latest safety devices and technological advances into the Australian market, while also contributing to the industry's cost competitiveness in the domestic market. Where a review results in a new or amended ADR, these changes are subject to full parliamentary scrutiny.

2. PURPOSE AND OPERATION

2.1. Overview of the Regulatory Framework

The RVSA establishes a regulatory framework to regulate the importation and first supply of road vehicles to the market in Australia. The core principle of this framework is that vehicles which comply with appropriate standards are suitable for provision to the market in Australia. The ADRs have set out those standards since the early 1970s. At that time, they were applied cooperatively by the Australian Motor Vehicle Certification Board representing the Commonwealth and state and territory governments. In 1989, this arrangement was replaced by the MVSA and the ADRs were determined as national standards. The RVSA commenced in full and replaced the MVSA on 1 July 2021. A two-year transition period was provided between 1 July 2021 and 30 June 2023.

Under the RVSA, the ADRs are National Road Vehicle Standards intended to make vehicles safe to use, control the emission of gas, particles or noise, secure vehicles against theft, provide for the security marking of vehicles and promote the saving of energy. The ADRs are applied to vehicles as criteria for approval under various regulatory pathways set out in the Road Vehicle Standards legislation. Vehicles approved under these regulatory pathways can be provided to the market in Australia for use in transport.

2.2. Overview of the Amending Instrument

The purpose of the Amending Instrument is to exempt purpose built heavy mobile cranes from having to comply with the current ADR requirements for a Vehicle Stability Function (VSF), Advanced Emergency Braking (AEB), and Lane Departure Warning Systems (LDWS).

With the transition to the RVSA, vehicles meeting the definition of mobile crane in the *Road Vehicle Standards (Classes of Vehicles that are Road Vehicles) Determination 2021* are determined to be road vehicles for the purposes of the RVSA. The majority of these mobile cranes are classed as category NC heavy goods vehicles, and without this amendment package, many mobile cranes with not more than three axles would continue to be required to meet the ADR requirements for VSF, AEB and LDWS.

The exemptions provided for in this Amending Instrument are only intended for those vehicles that are “principally designed and constructed” to raise, move, and lower freely suspended loads by the means of a crane that has a boom with a lifting moment greater than or equal to 400 kNm.

Here, “principally designed and constructed” is intended to cover those vehicles with a chassis purpose built for supporting and operating the crane system, while also allowing for movement of the vehicle on public roads between operating sites. It is not intended to cover any category NC truck built to be suitable for a range of other goods carrying purposes in addition to the option/possibility to be fitted with a crane. For example, a category NC vehicle that is equipped with a crane, but is built on a chassis designed and constructed to be suitable for any number of other goods carrying purposes (e.g. through the fitting of a flatbed for carrying general freight/goods, a tipper body, or a cement agitator etc.), is not “principally designed and constructed” to raise, move, and lower freely suspended loads.

The 400 kNm lifting moment has been taken from a definition used to classify special purpose vehicles as mobile cranes in the European Union (EU). This also differentiates purpose built mobile cranes from trucks fitted with a crane in addition to other load carrying space for goods. The lifting moment is to be calculated for the axis around which the crane boom pivots up and down. Further, the 400 kNm lifting moment need only be reached or exceeded for one design operating position of a telescopic boom (i.e. not necessarily all possible extension positions of such a boom).

The braking systems comprising VSF, AEB, and LDWS are not mandatory for purpose built heavy mobile cranes in other markets, including the EU and the United States. The design, development, certification and fitting of these systems specifically for two and three axle mobile cranes supplied into the Australian market may not be viable for many models. These are special purpose vehicles, have small sales numbers, and are only designed to be used on public roads to move between worksites. This means costs would need to be recovered from the sales for a small number of vehicles sold to the Australian market, while the limited distances travelled and the conditions under which these vehicles are operated, limit exposure risks to the types of crashes addressed by a VSF, AEB, or LDWS. It is also likely to be technically more difficult to install these systems on purpose built mobile cranes than trucks, especially for articulated cranes.

Further, without this Amending Instrument, there would continue to be the option for manufacturers of such two or three axle cranes to focus any re-design efforts on

meeting an existing exemption in the relevant ADRs for vehicles ‘designed for off-road use’, rather than fitting a VSF, AEB and/or LDWS (which could then reduce safety – for example, if clearance, approach/breakover/departure angles and the centre of gravity are raised to achieve an exemption). Without an exemption for purpose built mobile cranes, the market could also shift to favour heavier four axle cranes, which would not increase VSF, AEB, and/or LDWS fitment, as these systems are currently not required for heavy goods vehicles with four or more axles.

Additionally, another amendment has been included to address issues raised by air brake suppliers for heavy trailers. The amendment addressed an inconsistency between an ADR requirement and the equivalent international standard.

The following describes the amendments made in each schedule of the Amending Instrument:

Schedule 1 Amendments

Amends clause 5.1.8. of the Australian Design Rule 35/07 – Commercial Vehicle Brake Systems (ADR 35/07) to exempt any category NC vehicles which are principally designed and constructed to raise or lower heavy loads by means of a crane, with a lifting moment greater than or equal to 400 kNm, from having a VSF.

The purpose of ADR 35/07 is to specify braking requirements on commercial vehicles and large passenger vehicles to ensure safe braking under normal and emergency conditions.

Schedule 2 Amendments

Makes the equivalent amendments to the Australian Design Rule 35/06 – Commercial Vehicle Brake Systems (ADR 35/06) as in Schedule 1 for ADR 35/07. Vehicles that comply with ADR 35/07 are not required to comply with ADR 35/06.

Schedule 3 Amendments

Amends clauses 6.1.5.2.1.(c) and 6.1.5.2.1.(d) of the Australian Design Rule 43/04 – Vehicle Configuration and Dimensions (ADR 43/04) to exempt mobile cranes with an ‘Overall Width’ exceeding 2,500 mm from complying with the Australian Design Rule 97/00 – Advanced Emergency Braking for Omnibuses, and Medium and Heavy Goods Vehicles (ADR 97/00), the Australian Design Rule 99/00 – Lane Departure Warning Systems (ADR 99/00), or the Australian Design Rule 99/01 – Lane Departure Warning Systems (ADR 99/01).

The purpose of ADR 43/04 is to specify requirements for vehicle configuration and dimensions, including limits on vehicle width, length, and axle spacings.

Schedule 4 Amendments

Introduces a new clause 3.2.(e) of ADR 97/00 to exempt category NC vehicles which are principally designed and constructed to raise, move, and lower freely suspended loads by means of a crane, with a lifting moment greater than or equal to 400 kNm, from having AEB.

The purpose of ADR 97/00 is to specify requirements for AEB systems fitted to omnibuses, and to goods vehicles over 3.5 tonnes Gross Vehicle Mass, to avoid or mitigate the severity of rear-end in lane collisions.

Schedule 5 Amendments

Introduces a new clause 3.2.(e) of ADR 99/00 to exempt category NC vehicles which are principally designed and constructed to raise, move, and lower freely suspended loads by means of a crane, with a lifting moment greater than or equal to 400 kNm, from having a LDWS.

The purpose of ADR 99/00 is to specify requirements for LDWS fitted to omnibuses and medium and heavy goods vehicles, to warn a distracted or drowsy driver if the vehicle is unintentionally drifting out of its travel lane.

Schedule 6 Amendments

Makes the equivalent amendments to ADR 99/01 as in Schedule 5 for ADR 99/00. Vehicles that comply to ADR 99/01 are not required to comply with ADR 99/00.

Additionally, items 3 to 6 of this schedule amend ADR 99/01 to properly reference UN Regulation 130 incorporating the 01 series of amendments as the applicable alternative standard. The Explanatory statement for the making of ADR 99/01 noted that, at the time the instrument was made, the alternative standard clause was intentionally left as ‘reserved’, as the the 01 series of amendments had not yet come into force. The UN notified contracting parties on the 8 October 2024 that the 01 series had been adopted on 22 September 2024, which now allows for including the reference of this UN Regulation in ADR 99/01.

Schedule 7 Amendments

Schedule 7 contains other amendments not related directly to mobile cranes.

Amends clause 7.1.4 of Australian Design Rule 38/05 – Trailer Brake Systems (ADR 38/05) to allow for rounding of the referenced response time value. This aligns with the equivalent requirements in the international standard, United Nations Regulation 13 (UN R13).

The purpose of this is to ensure that there is not a barrier to the Australian market for newer air brake systems originally developed to comply to UN R13. These newer systems incorporate the roll-stability function required in both UN R13 and ADR 38/05 for new heavy trailers.

Items 3 and 4 are minor amendments to italicise defined terms.

3. MATTERS INCORPORATED BY REFERENCE

3.1. Legislative Instruments

Each legislative instrument (ADR) that is specified in a schedule to the Amending Instrument is amended as set out in the applicable items in the schedule concerned.

The amendments to the ADRs specified in each of the two schedules to the Amending Instrument do not incorporate any other legislative instruments by reference.

The ADRs may be freely accessed online through the Federal Register of Legislation. The website is www.legislation.gov.au.

3.2. Other Documents

Item 6 of Schedule 6 amends ADR 99/01 to incorporate by reference United Nations Regulation No. 130 – UNIFORM PROVISIONS CONCERNING THE APPROVAL OF MOTOR VEHICLES WITH REGARD TO THE LANE DEPARTURE

WARNING SYSTEM (LDWS) incorporating the 01 series of amendments. This is an international standard for LDWS fitted to omnibuses, and goods vehicles over 3.5 tonnes.

In accordance with paragraph 14(1)(b) and subsection 14(2) of the *Legislation Act 2003*, this UN document is incorporated as in force on the date this instrument is made.

UN Regulations and Resolutions may be freely accessed online through the UN World Forum for the Harmonization of Vehicle Regulations (WP.29).

The WP.29 website is www.unece.org/trans/main/welcwp29.html.

4. CONSULTATION

4.1. 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 Commonwealth and the state and 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 (or package of new or amended standards) is expected to have on industry or road users.

Proposals that are regarded as significant need to be supported by an Impact Analysis (IA) meeting the requirements of the Office of Impact Analysis (OIA) as published in the *Australian Government Guide to Policy Impact Analysis* or the *Regulatory Impact Analysis Guide for Ministers' Meetings and National Standard Setting Bodies*.

4.2. Specific Consultation Arrangements

The Commonwealth's two major consultative groups for the development and administration of the ADRs are the Road Vehicle Regulators' Forum (RVRF) and the Vehicle Standards Consultative Forum (VSCF). RVRF consists of the Department of Infrastructure, Transport, Regional Development, Communications and the Arts as the Commonwealth representative, state and territory governments, the New Zealand Government and Australian Government entities including the National Heavy Vehicle Regulator (NHVR), Austroads and the National Transport Commission. VSCF consists of the same members as the RVRF with the addition of peak bodies representing the vehicle industry, consumers and road safety.

The draft ADR amendments were provided for comment with consultation conducted in two phases. The proposed exemptions were consulted on for a one week (11 to 18 November 2024) with state and territory governments, including the National Heavy Vehicle Regulator. No objections were received during that period. The second consultation period ran for two weeks (19 to 3 December 2024) with all members of VSCF. No objections were received, and the amendments were agreed by the Crane Industry Council of Australia (CICA), the peak industry body representing the crane industry in Australia whose members are directly affected by this amendment.

5. REGULATORY IMPACT

5.1. Impact Analysis

A Preliminary Assessment (OIA24-08730) was undertaken to consider the impacts of exempting mobile cranes from the ADR requirements for VSF, AEB and LDWS. The assessment identified that exempting these vehicles would likely not introduce a significant risk to public safety. Exempting mobile cranes from these requirements would align with the same regulatory practices in other major markets from which these vehicles are sourced or designed, such as the EU and the United States. It was assessed that this will reduce regulatory burden on the mobile vehicle suppliers providing mobile cranes to Australia and reduce the administrative burden of assessing the suitability of exempting these vehicle braking technologies on a case by case basis.

A Preliminary Assessment (OIA24-07653) was undertaken for the amendments to ADR 38/05 (Schedule 7) to address an inconsistency between the ADR and the international equivalent standard, UN R13, for trailer brake timing requirements. The assessment outlined industry stakeholder concerns of not being able to meet the regulated requirements to fit trailers with a roll stability function without aligning with the timing requirements in UN R13. The assessment concluded that this change was a minor relaxation that aligned with international practices and was supported by brake suppliers in Australia.

5.2. Benefits and Costs

Based on the information provided in both the Preliminary Assessments, the OIA determined that a detailed analysis was not required under the Australian Government's Policy Impact Analysis Framework for either the amendments for mobile cranes (Schedules 1 to 6) or for the amendments to ADR 38/05 (Schedule 7).

6. STATEMENT OF COMPATIBILITY WITH HUMAN RIGHTS

The following Statement is prepared in accordance with Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

6.1. Overview

The Amending Instrument exempts purpose built heavy mobile cranes from having to comply with ADR requirements for a VSF, AEB, and LDWS.

6.2. Human Rights Implications

The Amending Instrument does not engage any of the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

6.3. Conclusion

The Amending Instrument is compatible with human rights, as it does not raise any human rights issues.