

Vehicle Standard (Australian Design Rule 69/00 – Full Frontal Impact Occupant Protection) 2006 Amendment 1

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 69/00 – Full Frontal Impact Occupant Protection) 2006 Amendment 1 was 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 69/00 was originally determined in *Road Vehicle (National Standards) Determination No 4 of 1992* and has been amended in five subsequent determinations.

2. CONTENT AND EFFECT OF ADR 69/00 – FULL FRONTAL IMPACT OCCUPANT PROTECTION AMENDMENT 1

2.1. Overview of the ADR

The function of this vehicle standard is to specify vehicle crashworthiness requirements in terms of forces and accelerations measured on anthropomorphic dummies in outboard front seating positions in full frontal test crashes. These requirements aim to minimise the likelihood of injury to occupants of those seating positions. ADR 69 also addresses prescriptive requirements for seatbelt warning systems to remind the driver buckle up.

2.2. Changes to the ADR

There are two changes; one that affects the seatbelt warning system requirements and the other deletes a reference to an ADR that has since become redundant.

The changes to the seatbelt warning system requirements are to align more closely with the international standard adopted by the United Nations Economic Commission for Europe (UNECE), thereby providing more flexibility for vehicle manufacturers. The amendment does not compel manufacturers to change existing systems; it merely provides the option to use alternative systems. More importantly, the amendments allow manufacturers to provide vehicles complying with the UNECE requirements without having to modify them to enter the Australian market.

As mentioned above the other change relates to the deletion of a reference to a redundant ADR. ADR 69 refers to ADR 18/02 Instrumentation, which effectively specified the location of the seatbelt warning light on the instrument panel. ADR 18/02 has since been superseded by ADR 18/03, which is markedly different in that it only addresses speedometer requirements; it does not address specifications for the location of instruments and warning lights. Since ADR 18/02 is no longer applicable to new vehicles the reference to it needs to be deleted.

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.

Changes resulting in relaxations or the introduction of alternative arrangements that do not affect the overall intent of the existing standards are discussed with the TLG in the first place and if unanimously supported may be determined without further consultation. TLG may request further consultation with TACE where determination would only proceed if unanimously supported. These proposals need to be supported by a Regulation Impact Statement approved by the Office of Best Practice Regulation.

New standards, or significant changes that increase the stringency of existing standards, may be subject to a vote by ATC Ministers following public comment and consultation with TACE. 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 approved by the Office of Best Practice Regulation.

However, ATC has agreed that proposals relating to internationally harmonised standards (harmonised with the regulations adopted by the United Nations Economic

Commission for Europe) that are broadly supported by stakeholders, could proceed directly to determination following public comment.

3.2. Specific Consultation Arrangements for this Vehicle Standard

The minor amendments to the seatbelt warning system requirements in ADR 69 were put to the TLG at its last meeting on 25 July 2007. TLG voted unanimously in favour of the proposed amendment.

TLG members also agreed that no further consultation was necessary. The State and Territory representatives were confident that they represented the views of their jurisdictions and that further consultation with agency chief executives or transport ministers was not necessary.

The amendment to delete the reference to the redundant ADR 18/02 was not discussed as it was always recognised that it would have to be removed once ADR 18/02

The RIS is attached at Appendix A.

APPENDIX A



Australian Government

Department of Transport and Regional Services

Regulation Impact Statement for
Minor Amendments to Vehicle Standard
(Australian Design Rule 69/00 – Full Frontal
Impact Occupant Protection) 2006

Seatbelt Warning System

Version 1 - 20 September 2007

Prepared by: Vehicle Safety Standards
Department of Transport and Regional Services

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1. Introduction

Australian Design Rule 69/00 – Full Frontal Impact Occupant Protection (ADR 69) addresses crash test procedures and pass/fail criteria for passenger cars, passenger vans, off road vehicles and light goods vehicles. It also addresses a prescriptive requirement for seatbelt warning systems to remind occupants to wear their seatbelts. This Regulation Impact Statement (RIS) addresses an amendment to the seatbelt warning system only.

The proposal is to amend clause 5.5.1 of ADR 69. The current clause 5.5.1 is:

5.5. Seatbelt Warning System

5.5.1. The vehicle must be fitted with a seatbelt warning system which activates a continuous or flashing '*Visual Indicator*' for a period of not less than 4 seconds when the vehicle's ignition switch is moved to the "on" position or to the "start" position. The seatbelt warning system need not operate if the drivers seatbelt is fastened or is withdrawn more than 10 cm from the retractor. An audible signal in addition to the '*Visual Indicator*' is permissible.

The proposed change is to replace clause 5.5.1 with:

"5.5.1 The vehicle must be fitted with a seatbelt warning system which activates a continuous or flashing '*Visual Indicator*' for a period of not less than 4 seconds when at least one of the following occurs:

- The vehicle's ignition switch is moved to the "on" position or to the "start" position, or
- Before the engine has been running for 60 seconds, or
- Before the vehicle has been in Forward motion for 500 metres, or
- Before the vehicle has reached a forward speed of 25 km/h

The seatbelt warning system need not operate if the driver's seatbelt is fastened or is withdrawn more than 10 cm from the retractor. An audible signal in addition to the '*Visual Indicator*' is permissible."

The proposed change does not compel manufacturers to adopt the new requirements but provides more flexibility. Vehicles that comply with the current clause 5.5.1 can continue to be offered as compliant vehicles. The new requirements are more closely aligned with the seatbelt warning system requirements recently adopted by the United Nations Economic Commission for Europe (UNECE) in June 2007.

This amendment was discussed with the Technical Liaison Group (TLG) at its 25 July 2007 meeting where the proposed amendment was unanimously supported. The TLG is the consultative committee for advising on ADR developments and includes members for the Australian, State and Territory governments, the vehicle manufacturing and operating industries and consumer groups.

One additional change is proposed because of the recent introduction of ADR 18/03 Instrumentation (there is a link between ADR 18 and ADR 69 – see below), which was phased into force over the period 1 July 2006 to 1 July 2007. Therefore, from 1 July 2007, the earlier version (ADR 18/02) can no longer be applied to new vehicles. The

issues included in the scope of ADR 18/03 are markedly different from those addressed in the earlier ADR 18/02, such that clause 5.5.3 of ADR 69 is no longer valid.

5.5.3. The ‘Visual Indicator’ must comply with the requirements of a Group 2 ‘Visual Indicator’ in ADR 18/... .

The main difference is that the earlier version of ADR 18 included prescriptive requirements relating to the location of telltales such as the seatbelt warning indicator while the new ADR 18/03 only addresses requirements relating to the speedometer. The Regulation Impact Statement that was published in November 2004 in support of the introduction of the new ADR 18/03 provides the justification for the change. It was always anticipated that this consequential change to ADR 69 was necessary, but could only be carried out when ADR 18/02 became fully redundant. This occurred with effect from 1 July 2007 and it is now time to delete clause 5.5.3.

1.1. International Standards

When ADR 69 was first published in December 1992, there were no internationally recognised regulations that addressed seatbelt warning systems. As mentioned above, seatbelt warning system requirements were only recently adopted by the UNECE in June 2007. The proposed change is closely aligned with the UNECE requirements and is fully supported by industry. A vehicle complying with the UNECE requirements would also comply with the amended ADR 69. However, retaining the current ADR 69 clause 5.5.1 unaltered, would result in vehicles incorporating the new UNECE complying seatbelt warning systems non-compliant and such vehicles would have to be modified to gain entry to the Australian market.

In relation to the clause 5.5.3 requirement for the seatbelt warning visual indicator to comply with the requirements of ADR 18, the change embodied in the new version mostly comes about because the new version of ADR 18 has been harmonised with the UNECE regulation for speedometers which does not address the location of visual indicators (telltales).

2. Options

The available options are:

- **Option 1** - Taking no action
- **Option 2** – Make the minor amendments agreed by the TLG and the consequential amendment concerning the location of the seatbelt warning indicator
- **Option 3** – Delete or harmonise with the UNECE where possible.

3. Analysis

3.1. Taking No Action

Vehicles would be required to continue to comply with the current ADR 69 seatbelt warning system requirements and in some cases would have to be modified to comply.

Failure to delete clause 5.5.3 would mean that a redundant requirement would be retained.

3.2. Make the minor amendments agreed by the TLG

Industry and regulatory agencies are fully supportive of the agreed amendments. This option will relieve industry of the cost burden of modifying vehicles to enter the relatively small Australian market.

As clause 5.5.3 is now redundant, to leave it in place would require vehicle manufacturers to comply with a non-existent requirement.

3.3. Delete the Seatbelt Warning System Requirements

ADR 69 was recently reviewed as part of the ADR Review program. There was no support for deleting the ADR or for amending any part of it.

The issue of seatbelt warning systems was separately reviewed in July 2005 to examine whether a more intrusive system would increase seatbelt wearing rates in Australia. The RIS concluded that while there would be net benefits from mandating a more persistent (audible) warning system than the current ADR 69 system, the marketplace was responding in a positive manner, making regulatory intervention unnecessary.

However, the issue of seatbelt warning systems remains open at this stage. The 2005 RIS noted that according to manufacturer surveys all passenger cars would be equipped with intrusive seatbelt warning systems by the end of 2006 – if not further consideration would be given to adopting legislative provisions. The implication was that a follow-up survey would be conducted early in 2007 to confirm the projected penetration rates. However, the recent adoption of seatbelt warning system requirements by the UNECE may have a significant effect on the penetration rate and it has been decided to postpone the follow-up survey until the middle of 2008 to allow some time for the UNECE requirements to take effect.

The logical conclusion to the 2005 seatbelt warning systems review could be that the voluntary marketplace response obviates the need for regulatory intervention and a decision would have to be made whether to retain, delete or replace the current ADR 69 requirements.

3.4. Non-Regulatory Options

There are no long-term viable non-regulatory options.

The established regulatory framework makes it an offence to offer non-compliant road vehicles to the Australian market. Under the *Motor Vehicle Standards Act 1989* the Minister may determine national standards and must approve road vehicles that comply with the applicable national standards. Vehicles of a particular type as defined under existing vehicle category codes contained in the ADRs must comply with the relevant ADRs before the Minister can approve them for supply to the Australian market.

However, Section 10A(2) of the Act provides for the Minister to approve non-complying vehicles if the Minister is satisfied that such non-compliance is only in minor and inconsequential respects. Currently, these provisions are only invoked for limited

numbers of vehicles and where there is a clear expectation that the relevant standards are about to be amended so that such vehicles would no longer be noncompliant.

In this case, a more enduring strategy is required.

3.5. Cost to Business

The current new vehicle certification system administered by DOTARS imposes several costs on industry. Before a new vehicle can be issued an identification plate (allowing it to be supplied to the market) evidence must be provided to prove that the vehicle meets all relevant ADRs. Primarily this evidence is summaries of tests performed on various components or the whole vehicle.

Option 2 will result in significant savings to industry by removing the need to modify vehicles built for world markets to enter the Australian market.

Option 1 would perpetuate costly modifications for some vehicles to enter the Australian market. This option has not been costed in any detail because it is not the favoured option. However, it is bound to be significant compared to the reduced cost represented by option 2.

Option 3 would result in similar cost savings as option 2 but a final decision can only be made following a review of penetration rates for more intrusive systems.

Business fully supports option 2.

3.6. Trade Facilitation

Option 2 will have a positive effect on trade facilitation.

4. Consultation

The minor amendments to ADR 69 were put to TLG at its last meeting on 25 July 2007. TLG voted unanimously in favour of **Option 2**.

TLG members also agreed that no further consultation was necessary. The State and Territory representatives were confident that they represented the views of their jurisdictions and that further consultation with agency chief executives or transport ministers was not necessary.

No consultation was undertaken in respect of the consequential amendment to delete clause 5.5.3 because it has become redundant and was earmarked for deletion once the new ADR 18/03 was fully phased in.

5. Conclusions and Recommendations

Options 2 and 3 are both viable options. However, Option 2 is regarded as the most effective short-term solution. Option 3 will be further considered in the follow up of the 2005 review of seatbelt reminders. Furthermore, the TLG agreed that option 2 is the best option.

6. Implementation and Review

The amendment to the relevant ADRs would be determined by the Minister for Local Government Territories and Roads under section 7 of the *Motor Vehicle Standards Act 1989*.

In general, the ADRs are subject to on-going development and the whole or particular requirements of any ADR can be subject to review should there be any concerns raised.

A follow-up to the 2005 seatbelt warning systems review will be conducted in 2008.

7. References

Australian Design Rules are available from
http://www.dotars.gov.au/roads/motor/design/adr_online.aspx

- *Motor Vehicle Standards Act 1989*
- Vehicle Standard (Australian Design Rule ADR 69/00 – Full Frontal Impact Occupant Protection) 2006
- Vehicle Standard (Australian Design Rule ADR 18/03 – Instrumentation) 2006
- Vehicle Standard (Australian Design Rule ADR 18/02 – Instrumentation) 2006
- UNECE Draft proposal for safety belt reminder systems - can be found at

<http://www.unece.org/trans/doc/2007/wp29/ECE-TRANS-WP29-2007-25e.pdf>
