

ACRS Submission



About the Australasian College of Road Safety

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is His Excellency General the Honourable David John Hurley AC DSC (Retd), Governor-General of the Commonwealth of Australia.

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Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of a collegiate climate amongst all those with responsibilities for and working in road safety; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; the promotion of road safety as a critical organisational objective within government, business and the community; and the promotion and advocacy of policies and practices that support harm elimination.

Proposed regulatory changes

The proposed regulatory changes are designed to "facilitate an increased take up of safer and cleaner heavy freight vehicles in Australia", including options for:

- Vehicles with enhanced devices for indirect vision and/or monitoring devices to detect other road users. The proposed changes would exclude from vehicle width and length measurements rear vision mirrors, devices for indirect vision, other devices to assist drivers to see objects in an area adjacent to the vehicle including crossover mirrors, and monitoring devices fitted as part of automated driving systems or systems to inform the driver of the presence of other road users in close proximity, all within certain limits to align with EU regulations, and subject to existing ADR requirements for external projections.
- Safer wider vehicles including four options, each with proposed new safety requirements. The proposed changes would provide the necessary space to fit EU mandated safety and environmental technologies. The options proposed are: increase width limit to 2.55m or 2.6m, for good vehicles over 4.5 tonnes only, or good vehicles and trailers over 4.5 tonnes.
- Vehicles with more efficient and/or productive axle configurations

The consultation paper states that the changes are "expected to have a positive impact on road safety, while vehicles fitted with the latest safety and emission control technologies to the Australian market. Safety is to be increased be helping drivers to be more aware of their surrounds, including to avoid and/or mitigate the severity of any collisions with other road users".

This submission will focus on the vision and monitoring devices and wider vehicles changes to maximise the safety outcomes and bring Australian heavy vehicles up to the best standard reasonably possible. This proposal is consistent with leading heavy vehicle safety internationally which is important to ensure Australia applies best practice into the future when the changes are intended to apply.

ACRS response to the Consultation Draft

ACRS strongly supports and welcomes regulatory changes for heavy vehicles which will improve road safety. In thinking about regulatory changes to heavy vehicles, there are potential impacts on both safety and cost.



ACRS believes safety should be the primary consideration, with cost a secondary consideration. The ultimate aim of heavy vehicle regulation should be to attain the highest safety standard available as mandatory for all heavy vehicles, both new and those in use.

a) Consistency of application

The discussion paper outlines various productivity benefits arising from the proposed changes, in terms of reduced modifications required for the Australian market and therefore purchase cost, larger vehicles, greater access to new vehicles and reduced red tape. However, while the proposed changes are likely to lead to safety improvements, the discussion paper does not outline what those improvements would be and does not explain in that context inconsistencies in which proposals apply to which vehicles and why. For example:

- Lane Departure Warning Systems (ADR 99/00) applies to—
 - sub-category NB2 and category NC with overall width exceeding 2.5m
 - but there are exceptions for certain good vehicles over 4.5 tonnes with overall width exceeding 2.5m, or sub-category NB2 and category NC
- Blind spot information systems (ADR 105/00) applies to—
 - Goods vehicles over 8 tonnes with overall width exceeding 2.5m
- Devices for indirect vision (ADR 14/03) applies to-
 - Sub-category NB2 and category NC with overall width exceeding 2.5m
- Side Underrun Protection (ADR 106/00) applies to-
 - Sub-category NB2 and category NC, and category TD vehicles with overall width exceeding 2.5m; and category TC vehicles over 4.5 tonnes aggregate trailer mass and overwidth exceeding 2.5m
 - Exceptions for Prime Movers
- Commercial vehicle brake systems (ADR 35/07) applies to-
 - Sub-category NB2 and category NC vehicles with overall width exceeding 2.5m
 - Category LEG, MB, MC, MD, NA, sub-category NB1, and sub-category NB2 and category NC vehicles with overall width not exceeding 2.5m, from various dates (yet to be determined).
 - o But there are various exceptions and additional requirements

The discussion paper should outline, for each proposed change, how the distinctions between mandatory and optional were chosen, based on the potential safety benefits provided. A Regulatory Impact Statement may be helpful in this regard.

The discussion paper references various UN regulations as justification for exemptions. However, ACRS notes that the current EU regulations provide a higher safety standard than the current UN regulations, and should be prioritised.

Much of the higher-level justification for the proposed changes centres on vehicle standards in the EU which also apply to a greater range of vehicles. It would be helpful for the discussion paper to clearly outline the progress the proposed changes will make towards mandating EU safety standards in Australia for all heavy vehicles. A path should be described for the changes to apply initially to all new heavy vehicles in Australia, then to retrofit to the existing fleet where practicable. ACRS understand this process will take time and require an implementation period, given the differences between heavy vehicles in the EU and in Australia. A timeline should be included in the discussion paper.

b) Side underrun protection

ACRS notes that the proposed changes to increase the width limits will allow not just visibility improvements but will also increase the adoption of side underrun protection, which is an important road safety feature (1, 2). To maximise the benefit from this and other safety features included in the proposed changes, ACRS supports the Option A approaches which include both vehicles and trailers, rather than Option B, including only vehicles.

As noted above, ACRS believes the ultimate goal should be the highest safety standards applying to all heavy vehicles. It would be helpful for the discussion paper to address options for retrofitting technologies to existing vehicles.

c) Research on safety benefits

Developments in safety technologies for vehicles are rapidly advancing, and research into their utility and effectiveness in increasing safety and decreasing crashes and trauma must keep up to ensure that evidence-based approaches are taken. This is especially important when considering interactions of the human user with the technologies - both individual and multiple (3). Auditory warnings are helpful and can increase safety, but unreliable warnings diminish driver response (4, 5). Reversing autonomous emergency braking can help overcome diminished driver responses. Convex mirrors increase the view of drivers, reducing blind spots, but provide false information about the distance of vehicles in the adjacent lane, introducing new vision and judgement problems.(6, 7) Options such as clear panels in doors and footwells for heavy vehicles in cities and areas of high pedestrian activity are simple design solutions with potential for further implementation, and without the complexities of technologies.

Conclusion and Recommendations

ACRS strongly supports all regulatory changes to improve road safety. The proposed changes to heavy vehicle regulation are supported in principle, but note that:

- The safety benefits should be more clearly articulated;
- A process towards achieving the ultimate aim of the highest safety standards available being mandatory on all heavy vehicles should be outlined;
- Consideration should be given to evidence around the utility and effectiveness of each proposed safety technology, including human interaction, and interactions among the various technologies.

ACRS appreciates the opportunity to comment on the proposed freight vehicle regulation changes and contribute to safer heavy vehicles in Australia. Please do not hesitate to contact me if you require any further information.

Dr Ingrid Johnston

CEO, Australasian College of Road Safety

30 June 2021



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