

**Department of Infrastructure, Transport, Cities and Regional Development**  
**Feedback Form for Regulation Impact Statement**

To be used by all interested parties

Closing date for comments – **4 October 2019**

Report No.: INFRA/VSS01/2019	Report Date: August 2019	File No.: 19/684	OBPR Reference No.: 25313
Title: Regulation Impact Statement Reducing Heavy Vehicle Rear Impact Crashes: Autonomous Emergency Braking			

**A. Please provide details of your organisation<sup>1</sup>**

<b>Name of Organisation</b>	Australian Trucking Association
<b>Contact Person</b>	Bill McKinley
<b>Position</b>	Chief of Staff
<b>Contact Details</b>	Email: bill.mckinley@truck.net.au
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**B. Please indicate which option you support**

Option 1 – No intervention	<input type="checkbox"/>
Option 2 – User information campaigns	<input type="checkbox"/>
Option 3 – Fleet purchasing policies	<input type="checkbox"/>
Option 4 – Codes of practice	<input type="checkbox"/>
Option 5 – Mandatory standards under the Competition and Consumer Act 2010	<input type="checkbox"/>
Option 6a – Mandatory standards under the Road Vehicle Standards Act 2018 (Australian Design Rule) – broad scope	<input checked="" type="checkbox"/>
Option 6b – Mandatory standards under the Road Vehicle Standards Act 2018 (Australian Design Rule) – narrow scope	<input type="checkbox"/>

<sup>1</sup> The final version of the Regulation Impact Statement will include an analysis of the feedback received. Peak representative bodies and government agencies may be identified as part of this analysis.

**Please return comments to:**

Vehicle Safety Standards  
 Department of Infrastructure, Transport, Cities and  
 Regional Development  
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 GPO Box 594  
 CANBERRA ACT 2601

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 Phone: (02) 6274 7503  
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C. Please include any comments

See attached submission.



# REDUCING HEAVY VEHICLE REAR IMPACT CRASHES: AUTONOMOUS EMERGENCY BRAKING CONSULTATION RIS

AUSTRALIAN TRUCKING ASSOCIATION SUBMISSION  
9 OCTOBER 2019

## 1. About the Australian Trucking Association

The Australian Trucking Association and its member associations collectively represent 50,000 businesses and 200,000 people in the Australian trucking industry. Together we are committed to safety, professionalism and viability.

## 2. Introduction

The Department of Infrastructure, Transport, Cities and Regional Development's consultation RIS on reducing heavy vehicle rear impact crashes sets out six options (including two sub-options) for addressing the number and severity of these crashes.<sup>1</sup>

The RIS recommends option 6a: the adoption of an Australian Design Rule of broad scope. Combined with the extension of mandatory ESC to new rigid trucks, this option would:

- save 102 lives
- prevent 2,564 serious injuries and
- prevent 7,017 minor injuries.

The option would deliver a BCR of between 1.7 (likely case) and 2.5 (best case).<sup>2</sup>

## 3. About the proposed Australian Design Rule

The proposed ADR would implement UNECE regulation 131,<sup>3</sup> which requires AEB systems to:

- operate at least within the vehicle speed range of 15 km/h to the maximum speed of the vehicle, unless manually deactivated<sup>4</sup>
- detect the possibility of a collision with a preceding vehicle of category M (a car or bus), N (a truck) or O (a trailer) in the same lane<sup>5</sup>
- initially generate a collision warning and then follow up with emergency braking<sup>6</sup>
- provide drivers with the opportunity to interrupt both the collision warning and emergency braking phase, if a collision is not imminent.<sup>7</sup>

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<sup>1</sup> DITCRD, [Reducing heavy vehicle rear impact crashes: autonomous emergency braking](#). Consultation regulation impact statement, August 2019.

<sup>2</sup> DITCRD, 44.

<sup>3</sup> [Uniform provisions concerning the approval of motor vehicles with regard to the advanced emergency braking systems \(AEBS\)](#), UNECE R.131.

<sup>4</sup> s 5.2.3.

<sup>5</sup> s 5.2.1.1

<sup>6</sup> ss 5.2.1.1, 5.2.2

<sup>7</sup> ss 5.3.1-5.3.3

The proposed ADR would also mandate ESC for new rigid trucks.<sup>8</sup>

#### 4. ATA position on advanced braking technology

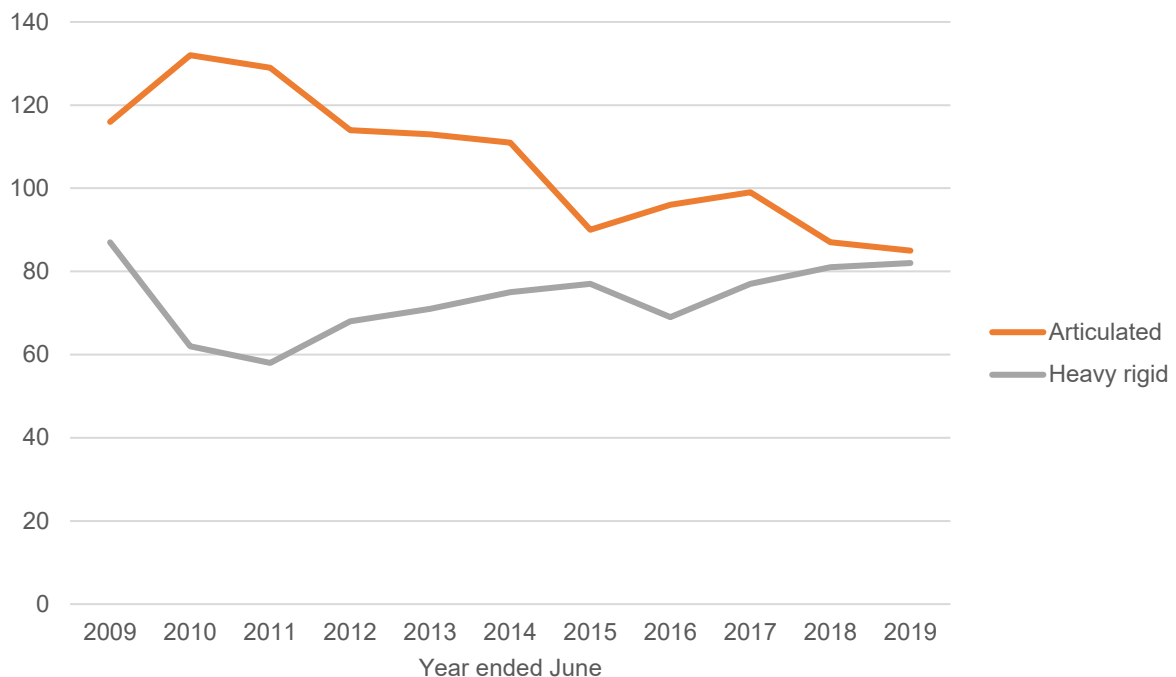
The ATA has strongly argued for the adoption of mandatory ESC<sup>9</sup> and AEB<sup>10</sup> for new trucks.

**Accordingly, the ATA supports option 6a, subject to the recommendations in this submission.**

It is particularly important that ESC and AEB are mandated for new rigid trucks as soon as possible.

As figure 1 shows, the number of fatal crashes in Australia involving articulated trucks shows a clear downward trend. In contrast, the number of fatal crashes involving heavy rigid trucks is increasing.

Figure 1: Fatal crashes involving trucks, Australia, 2009-2019



Source: BITRE

Fatal crashes involving rigid trucks are more likely to occur in speed zones consistent with urban areas than crashes involving articulated trucks.<sup>11</sup>

As Australia's urban population grows and transport infrastructure construction peaks, the number of crashes involving heavy rigid trucks will increase too – unless action is taken.

<sup>8</sup> DITCRD, 55.

<sup>9</sup> ATA, [Improving the stability and control of heavy vehicles](#). Submission to DIRD (now DITCRD), February 2018.

<sup>10</sup> [Evidence to the Joint Standing Committee on Road Safety](#), Parliament of NSW, Sydney, 9 April 2018, 3 (Bill McKinley, ATA)

<sup>11</sup> Holmes, M. "A review of international best practice to improve heavy vehicle safety in urban environments." Presentation to the 2019 Australasian Road Safety Conference.

The ATA's consultations with its members have identified two technical issues about the application of mandatory AEB to Australia that need to be addressed. These are:

- the inconsistent results experienced by operators that fit bull bars to their trucks (section 5)
- uncertainties about the operation of emergency braking on unpaved roads, particularly where trailers do not have electronic braking fitted (section 6).

## 5. Bull bars

Bull bars are a necessity for trucks in rural and regional Australia, because they reduce the cost and safety risk of animal strikes.

Trucking operators report varying degrees of success in fitting bull bars to trucks equipped with AEBS.

Some operators have found they can successfully integrate their bull bar design with AEBS. Others have found it difficult to fit bull bars without blocking the AEB sensor.

Given these inconsistent results, the ATA recommends:

### Recommendation 1

Before 1 November 2020, DITCRD should consult the trucking industry, bull bar suppliers, truck manufacturers and brake system OEMs and develop guidance material to ensure that the bull bars supplied to the market are compatible with AEBS.

## 6. Extending the implementation timeframes for new prime movers

In the ATA's member consultations, trucking operators and drivers raised uncertainties about the operation of AEB on Australia's 493,000 kilometres of unpaved roads. Particular concerns were raised about multi-combination vehicles where some or all the trailers do not have electronic braking.

AEB systems are not formally certified for their operation under these circumstances. The certification procedures under UNECE R.131:

- require the tests to be undertaken on a flat, dry concrete or asphalt surface.<sup>12</sup>
- do not, the ATA understands, include tests with trailers.

To address these uncertainties, the ATA considers that it would be appropriate for DITCRD to:

- carry out technical consultations with industry about the effectiveness of AEBS under Australian rural conditions
- work with industry, truck manufacturers and brake system OEMs to hold one or more demonstration days to validate the effectiveness of AEBS under Australian rural conditions and provide technical guidance for operators.

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<sup>12</sup> UNECE R.131, s 6.1.1

In the ATA's view, it would be necessary to extend the implementation timeframes for the introduction of mandatory AEB for prime movers by one year to enable this validation work to be carried out and the results communicated to industry. The proposed implementation timeframes for rigid trucks would not be extended.

Accordingly, we recommend that:

### **Recommendation 2**

During 2020, DITCRD should:

- carry out technical consultations with industry about the effectiveness of AEBS under Australian rural conditions
- work with industry, truck manufacturers and brake system OEMs to hold one or more demonstration days to validate the effectiveness of AEBS under Australian rural conditions and provide technical guidance for operators.

### **Recommendation 3**

The introduction of mandatory AEB for prime movers should be delayed until November 2021 for new vehicle models and November 2023 for all new vehicles.