
THE AUSTRALIAN AUTOMOTIVE AFTERMARKET ASSOCIATION

INDUSTRY POSITION PAPER

VEHICLE FRONT PROTECTION SYSTEMS (VFPS)

BULL BARS

June 2009.

INTRODUCTION

The negative reaction to bull bars often happens when they appear in urban areas. Some people comment that there are not many kangaroos in the CBD so why the need for front protection?

Each year in Australia many thousands of collisions occur between motor vehicles and animals, resulting in considerable vehicle repair costs, injury to persons, and loss of animal life¹.

Research focus on animal-related road crashes in Australia from the Rural and Remote Road Safety Study in North Queensland (for serious casualties resulting from direct impact with an animal or swerving to avoid an animal on public roads) found that animal collisions accounted for 5.5% of all eligible on-road serious casualties in the study. Kangaroos and wallabies were the predominant species involved in these crashes (44.8%). Night-time travel was found to be a significant risk factor when comparing animal-related crashes to other serious injury crashes in the study. Data matching to official Government records found underreporting of animal-related crashes to be an issue of concern.

In 2007 NRMA Insurance recorded over recorded over 9000 animal-related collisions in NSW alone, with the total cost to the NSW Community estimated at \$70 million. Kangaroo strikes accounted for 78% of these claims with the report noting that

¹ Rowden, Peter J. and Steinhardt, Dale A. and Sheehan, Mary C. (2008) **Road crashes involving animals in Australia.** *Accident Analysis and Prevention* 40(6):pp. 1865-1871. Centre for Accident Research and Road Safety - Queensland (CARRS-Q),

“Kangaroos will often look for food and water near busy roads or even in urban areas”.

The Australian landscape and our broad expanse of rural roads often expose road users to encounters with animals, with the majority of serious collisions occurring in regional, rural and outer urban areas. The condition of many regional roads and our road design which includes verges and drainage ditches running alongside major roads increases the risk of animal strike, particularly in drought conditions.

The **Australian Transport Road Safety Bureau** examined bull bars and road trauma (2000) and found that in the Australian environment there are positive and negative aspects of bull bars with regard to road trauma and fatal road crash data. Their final conclusion was that there is a significant lack of data on animal strikes. In their view it was impossible to isolate the effects of bull bars on pedestrians from other factors associated with injury outcomes such as **vehicle size and speed**.

Whilst most understand the danger of hitting domestic stock and wildlife on Australian roads and understand that a bull bar will save drivers and occupant's lives, there is concern about the effect on pedestrians. However, logic tells us that it is not the bull bar that is the issue – and the transport safety agencies agree that all vehicles are a danger to pedestrians. Any pedestrian/vehicle collision will result in injury to the pedestrian and more so if the vehicle is heavy and the collision is at speed. The most common indicator of likely pedestrian harm is the speed and the weight of the vehicle not the presence of a bull bar.

Pedestrians are our most vulnerable road users and yet we do not impose any pedestrian safety regulations on bicycles, motorbikes, cars, trucks, commercial or public transport vehicles. We do not require car makers to test their vehicles for head injury to pedestrians. There are no requirements for airbags on the outside of any vehicle currently in production.

Why is this? Why don't we design pedestrian friendly vehicles? Because pedestrians and vehicles simply don't mix. Because the **best way to protect pedestrians is to make sure they do not come into contact with a moving vehicle**. No design specification is capable of protecting a pedestrian from the harm inflicted by connecting with a one tonne moving vehicle.

Due to government driver education, drivers know that the best way to protect pedestrians in urban areas is to **slow down**. Protecting pedestrians is a **road safety issue**; we need to ensure that vehicles and pedestrians are kept at a safe distance from each other – urban road design, speed limits, pedestrian crossings and road safety education, save pedestrian lives. If we accept that no vehicle is friendly to pedestrians, why then is there so much talk about bull bars? So much discussion about banning and regulating? Because we can see the bull bar, this accessory is obvious to all observers.

The response from government regulators is to seek to have bull bar mandated pedestrian safety requirements despite the fact that we do not impose pedestrian safety standards on the actual vehicle. It is disappointing when government regulators seek to impose unreasonable and illogical regulations. The consequences are that this industry must fight a rear-guard action with every transport regulator in the country. Where is the data – where is the evidence and where is the proof of the bull bar's affect in a low speed urban collision with a pedestrian? Many claims are made about pedestrian deaths and serious injury associated with impact with a bull bar yet the Australian Transport Safety Bureau reported as recently as the year 2000 that “there is a dearth of scientifically based studies of the effect of bull bars on road safety.”² They went on to state “No quantification of the positive aspects of bull bars in animal strikes was found in the literature.”³ . Further, the report goes on to say “Because of these limitations it was not possible to draw firm conclusions about the contribution of bull bars to road trauma in Australia.”⁴

The Australian Automotive Aftermarket Association would welcome independent studies that can clearly demonstrate real data on the actual impact for pedestrians and other vulnerable road users whilst acknowledging the risks associated with Australia's unique environmental and geographic conditions.

So what are the legislators using to guide their constant review and changing positions on the standards and the regulations? European Standards would appear to be the foundation argument. Australian

² Road Safety Report - CR200 – Australian Transport Safety Bureau – Dec 2000

³ Road Safety Report - CR200 – Australian Transport Safety Bureau – Dec 2000

⁴ Road Safety Report - CR200 – Australian Transport Safety Bureau – Dec 2000

driving conditions vary enormously from European conditions; particularly the physical and weather environment, the drought increasing the incidents of large native animals on urban roads, the level and concentration of built up areas in Europe compared to Australia. These factors all make Australia a unique driving environment and in our part of the world, bull bars are designed to save the lives of the drivers and passengers of the vehicle. An impact at over 25 kilometres an hour with a large native or domestic animal will result in driver and passenger injury and death. Whilst some members of the public perceive these accessories as unnecessary – the producers, distributors and users of VFPS, know that bull bars save lives.

In Australia the specific nature of road crashes involving animals has not been rigorously studied in the field of road/traffic safety and, consequently, countermeasures designed to address such crashes have been limited in success and scope. Very little data is available on the overall patterns of road crashes involving animals within Australia. Official road crash reporting databases only record those crashes that are reported to the police agencies and jurisdictions across Australia are not consistent in regard to reporting categories for crashes that: (1) involve swerving to avoid an animal and (2) where animals are actually the first object hit by a vehicle. Inconsistencies in data reporting make collation difficult and almost certainly result in an under-representation of the actual extent of the problem⁵.

The Industry - the manufacturers, importers, distributors, retailers, accessory fitters and the drivers all believe in National Standards for bull bar design and fitting. But how is it possible to comply with standards and to support their enforcement when the regulators do not agree with each other and the regulation of the standards is not uniform across Australia. Significant disagreement exists between states on the regulation and enforcement of bull bars. The affect of many of the proposed regulations would result in regulations that are unworkable and illogical.

⁵ **Other sources of data** such as hospital records, ambulance records, coroner's reports, and in-depth crash studies may provide valuable insight into the prevalence of human casualties as a result of animal-vehicle collisions is rarely disseminated to the public. Further **limited information** for animal-vehicle collisions is publicly available **from motor vehicle insurers** (e.g. AAMI, 2007, NRMA, 2003 and NRMA, 2005) **and from wildlife welfare research** examining road kill statistics.

Bull bars are a legal accessory and it is reasonable for the industry to ask all governments to substantiate their position with evidence and to be logical, clear and consistent in the regulation and enforcement of Australian Standards for bull bars.

BACKGROUND

The relevant Australian Standard for VFPS (bull bars) is AS 4876.1 2002. Motor Vehicle Frontal Protection Systems. Part 1: Road User Protection

This Standard consists of three parts:-

1. Geo-styling
2. Engineering
3. Pedestrian head impact mitigation

While parts of the Standard have been adopted into regulation by some States, NSW is the only State to reference section 1 and 2 of the Standard in full in its regulations, thereby making it enforceable.

Section 3 (Head Impact Criterion) of the standard has not been adopted as it would impose a higher level of compliance from VFPS manufacturers than car manufacturers.

The Victorian State Government's adopted position on the installation of bull bars – VFPS (Vehicle Frontal Protection Systems) was formed following a 2003 Parliamentary Road Safety Committee's Inquiry into Road Safety for Older Road Users and based on the Minister for Road and Ports support for:

- Mandated compliance with AS 4876.1
- Seeking Standards Australia agreement to review AS 4876.1 and to consider adopting aspects of the European Directive (2005/66/EC) relating to bull bars
- A communication and publicity campaign to increase consumer awareness about road safety issues and other implications of fitting bull bars to vehicles

MISINFORMATION

VICTORIA'S RECENT BULL BAR CAMPAIGN/VICROADS POSITION ON VFPS

The Vicroads campaign "Seven Reasons why bull bars can be dangerous" was implemented as a result of the above recommendations and was undertaken without any consultation with the AAAA, the VFPS manufacturing sector or the 4WD Drivers.

As a result the campaign manages to misinform consumers and defame manufacturers.

The campaign needs to be challenged on a number of levels. One of the most significant and misleading aspects of the campaign is the linking of VFPS and pedestrian road deaths. Particularly the statement that pedestrians are 50% more likely to be killed in a collision with a vehicle fitted with a bull bar. Vic Roads does not have any data or evidence to substantiate this claim. Similarly, the Vic Roads campaign falsely implies that about 90 people were fatally injured by bull bars. This figure is not correct. This data is drawn from the national road data base and we believe that it may be related to all fatalities with a bull bar – there is no suggestion that these accidents even involved a pedestrian and the national data base does not record pedestrian fatalities/injuries and the incidence of bull bars.

The industry is interested in working with government to make our roads safer for all road users, but the Victorian government campaign is not a constructive contribution to this dialogue. The use of the data is false and misleading and the public campaign is an insult to the industry and to road users. We all have a responsibility to quote the available data accurately and to be honest about the lack of data and testing on bull bars and pedestrians. Victoria does not have data on pedestrian and bull bar impact and the government should not condone a misleading campaign that quotes single vehicle accidents on country roads without a pedestrian in sight, as an argument against bull bars.

THE INDUSTRY

The 4WD sector of AAAA membership:

- Contributes up to \$470 million to the Australian economy (a combination of \$350 million in retail sales and \$90 million in exports).
- Earns one third of revenue from vehicle frontal production systems.

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- Manufactures for both OE (Original Equipment) and Aftermarket and is subject to uniform and stringent manufacturing standards guidelines.
 - Includes a small business component where 83% of companies have <\$5 million turnover and 20 employees.
 - Is multi-skilled with representation in manufacturing, distribution, retailing, importing, exporting and services across the supply chain.
 - Is dependent on two of products – VFPS and suspension modification products that are subject to heavy regulatory pressure.

The Australian Automotive Aftermarket Association and our members in the 4WD industry are committed to national design standards and their enforcement. We believe that vehicles with non compliant bull bars should be removed from our roads. Our industry members are able to identify a non compliant bull bar at a distance – it is actually very clear when a bull bar has not been fitted correctly and even more obvious when it does not meet geo-styling standards. We do not understand the problem with enforcement - this is an accessory that is as obvious as the headlights. We believe in safety, in quality and in enforcement of the road regulations to remove vehicles that do not meet the standards. If government agencies are receiving public comments about bull bars and are genuinely concerned about their use – a campaign of removing non compliant vehicles would be evidence of this commitment. Yet Australia wide, very few if any resources are committed to enforcement.

INDUSTRY SUPPORT FOR STANDARDS AND ENFORCEMENT

AAAA has been instrumental in developing AS 4876.1 (2002). Substantial industry consultation and formal discussions between bull bar manufacturer, retailers, distributors and fitters occurred before the AAAA provided a submission to the development of the standard.

The provision of the national standard AS 4876.1 is only the first part of the process of ensuring that this vehicle accessory complies with community expectations. National Standards such as AS 4876.1 are implemented by state and territory governments translating the standards into state regulations. AAAA believes that the linking of current Standards to Regulation by State authorities is not uniform. **AAAA believes that there is a contradiction between the position of regulatory and transport authorities on this issue.** The regulations made by each state effectively ensure the enforcement of the standards.

There is little value in establishing a national standard if each state is not going to enforce the standard and effectively remove non compliant vehicle from our roads. Without enforcement it is difficult to accept state government commitment to protecting road users from the consequences of non compliant accessories.

THE EUROPEAN DIRECTIVE

The EU Standard articulates a position on pedestrian safety. The AAAA believes that European Directive (2005/66/EC) has been developed for European driving conditions that include a greater proportion of urban development than Australia. The Directive would not have accounted for driving conditions , such as those experienced in Regional Australia, that include drought and the intrusion of stock and large native wildlife on roads.

AAAA also contends that Section 3 of AS 4876.1 and the European Directive place undue emphasis on VFPS manufacturers rather than recognition of the total context of the problem, which is the management of the shared environment between pedestrians and transport vehicles.

It is the belief of the AAAA that it is simply not possible to design and manufacture any form of effective and commercially viable bullbar that would meet the EU standard.

AAAA believes that with uniform regulation and enforcement AS 4876.1, Sections 1 & 2 would be effective.

WHAT DOES THE INDUSTRY WANT?

AAAA is seeking the opportunity to provide input to government transport and regulatory policy that affects the 4WD industry. The manufacturers, distributors, retailers, fitters and drivers are all part of this industry and any discussion about increased regulation and regulations that are not consistent with national standards should involve a discussion with the industry.

Furthermore AAAA believes that:

- **AS 4876.1 2002 Sections 1 and 2 should not be reviewed.**
- **AS 4876.1 2002 Sections 1 and 2 should be adopted and enforced nationally.**

Consumer awareness of road safety and the implications of fitting a VFPS can be achieved through a campaign that:-

- a) Encourages drivers to purchase product produced and fitted by a supplier conforming to AS 4876.1 2002 Sections 1 and 2.
 - b) Promotes appropriate driver behaviour in an urban environment with pedestrian traffic.
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