
*FCAI Response to
Regulation Impact Statement
for Brake Assist Systems*



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(30 June 2013)

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EXECUTIVE SUMMARY

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing vehicle manufacturers and importers of passenger vehicles, light commercial vehicles and motorcycles in Australia.

The FCAI welcomes the opportunity to provide a response to the Australian Government's Regulation Impact Statement (RIS) for the fitting of Brake Assist Systems to all Light Vehicles, i.e. passenger cars, sport utility vehicles (SUVs) and light commercial vehicles (LCVs).

The FCAI supports the fitting of important safety features such as Brake Assist Systems (BAS) (and Electronic Stability Control (ESC)). FCAI members have taken a pro-active approach with fitting BAS in the absence of regulation as new or upgraded models are released to the Australian market. Indeed the RIS acknowledges that the industry has responded with fitting rates of BAS at 90 per cent for passenger cars and SUVs and 45 per cent for LCVs. A recent FCAI survey indicates that the fitting rate of BAS in LCVs is currently above 70 per cent, is expected to be over 90 per cent by the end of this year and will reach 100 per cent fitting between 2016 and 2018.

As such the FCAI does not see a need to regulate and mandate fitting of BAS to all light vehicles via an ADR.

While the FCAI does not see the need to mandate fitting BAS to all light vehicles (as there is no market failure), if the government wishes to undertake this action the FCAI considers the regulation needs to:

- Be harmonised with the international UN-ECE Regulations.
- Accept the technical requirement of other national standards (e.g. EC Regulation, US FMVSS) as 'alternative standards.'
- Provide an appropriate lead time for both industry and government to undertake the necessary administration processes required for the government's certification process.

The industry considers the implementation dates of an ADR should be (not before):

- 1 November 2015 for new models.
- 1 November 2017 for all vehicles.

The implementation dates are based on the provisos that the:

- technical content of the new ADR 31/03 and 35/04 are acceptable, and
- new ADR 31/03 and 35/04 will be registered on FRLI by 1 November 2013, i.e. at least 2 years prior to 1 November 2015.

The implementation timing is necessary to provide sufficient lead-time for both government and industry and is not detrimental to safety as the industry is already supplying vehicles fitted with BAS (and ESC) and the fitting rate will continue to increase with the introduction of new models.

1.0 INTRODUCTION

The Federal Chamber of Automotive Industries (FCAI) is the peak industry organisation representing vehicle manufacturers and importers of passenger vehicles, light commercial vehicles and motorcycles in Australia.

The FCAI welcomes the opportunity to provide a response to the Australian Government's Regulation Impact Statement for the fitting of Brake Assist Systems (BAS) to all light vehicles (i.e. MA, MB, MC and NA categories).

The Regulatory Impact Statement (RIS) recognises that the market is responding to fitting BAS to light vehicles. However, the cost-benefit analysis found the government should intervene and mandate the fitting of BAS as this would ensure 100 per cent fitting rate.

Therefore, the RIS recommends adopting a mandatory standard for fitting of BAS under the *Motor Vehicle Standards Act 1989*, i.e. mandate the fitting of BAS to Ma, MB, MC and NA Category vehicles under Australian Design Rules (ADR) 31 and 35 in line with the technical requirements of UN-ECE R13-H or R13/11 respectively. The RIS proposes an introduction timetable of 2015 for new models and 2016 for all models.

The RIS does not specify month for the proposed introduction timings or draft ADRs 31/03 and 35/04. Even though the FCAI does not agree there is a need to mandate BAS, this response will propose introduction timings and also recommend ADR changes that would be required to mandate BAS on all light vehicles.

The FCAI supports the fitting of important safety features such as BAS and its members have taken a pro-active approach with fitting BAS in the absence of regulation as new or upgraded models are released to the Australian market. Indeed the RIS acknowledges that the industry has responded with increases in fitting rates of BAS into light vehicles.

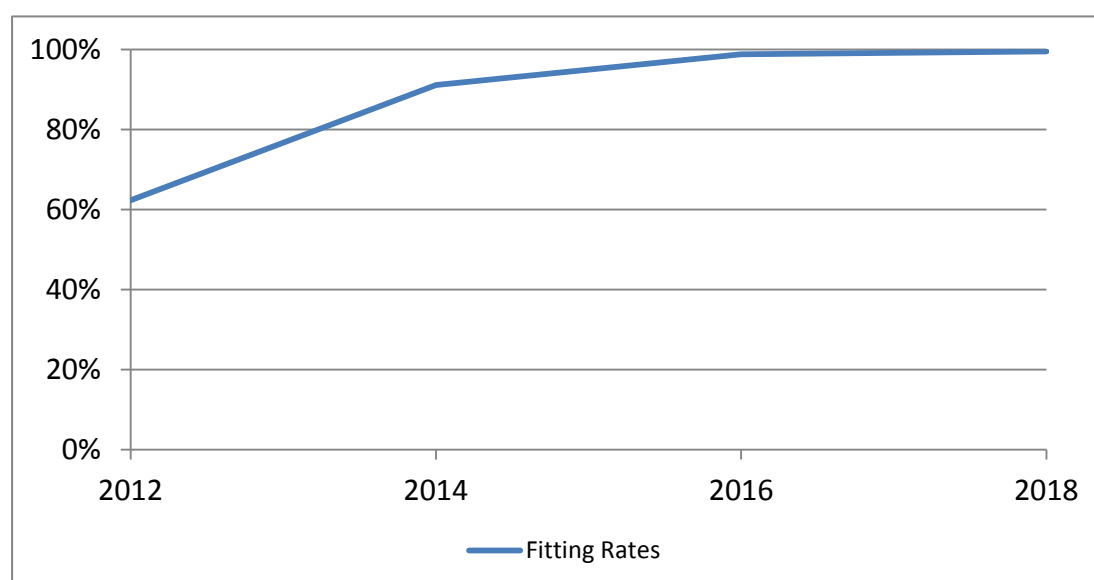
2.0 CURRENT FITTING RATES OF BAS

The FCAI considers a regulation to mandate fitting of BAS to all light vehicles (category MA, MB, MC and NA) is not justified as the market is responding and there is a high fitting rate of BAS.

The RIS acknowledges that the BAS fitting rate for passenger cars and SUVs is at 90 per cent. The remaining 10 per cent of these market segments will be fitted with BAS as new models are introduced over the next couple of years as BAS is now included as standard with modern braking systems (along with ESC and ABS).

The RIS suggests that with fitting rates of BAS in LCVs is only at 45 per cent. A more recent FCAI survey indicates the fitting rate is currently above 70 per cent, is expected to be over 90 per cent by the end of this year and will reach 100 per cent fitting rate between 2016 and 2018. Figure 3.1 (below) shows the results of this survey.

Figure 3.1 - LCV rates of fitting BAS (and ESC)¹



It must be recognised that the fitting rates of BAS (and ESC) in LCVs, and the apparent lagging of fitting to passenger cars and SUVs are dependent on a number of factors including:

- Priority of fitting BAS (and ESC) to passenger vehicles (category MA, MB and MC).
- Longer model cycle of LCVs compared with passenger vehicles.
- Timing of development programs for new models.
- The product development, testing and verification programs required for each model is more than 4 years prior to introduction into the market. This is further expanded in Section 4.0 below.

¹ Fitting rates are estimated from a survey of FCAI members and based on 2012 sales volumes.

3.0 PROPOSED IMPLEMENTATION TIMING

The FCAI does not support the draft RIS proposed implementation timing of 2015/2016 as this does not take into consideration the time required for both the industry's and government's administrative processes required for certification. While this paper responds to the RIS for mandating BAS to all light vehicles, it needs to be remembered that the government has also proposed mandating ESC to light commercial vehicles with the same implementation timing.

If the government decides a regulation is necessary, it must be recognised that sufficient lead time needs to be provided to allow both industry and government to undertake the necessary administrative processes required for the certification process for both BAS to all light vehicles and ESC to LCVs. BAS and ESC are both part of the vehicles braking system and will be regulated through the same ADR, i.e. ADR 31/03 for passenger vehicles and ADR 35/04 for commercial vehicles.

The timing must allow for certification of more than 350 models of light vehicles from more than 50 brands from a range of source countries from Asia, Europe and the US. Appendix 1 provides an overview of the Australian automotive industry.

The actions required to be undertaken by the government includes:

- Finalising and registering an ADR on the Federal Register of Legislative Instruments (FRLI) (vehicle brands will not be able to commit funding and other resources to program the necessary certification testing until the final ADR with implementation timing and regulation standard is completed and registered).
- Finalising and publishing any necessary Administrator's Circular to provide guidance to brands on selection of test vehicles. For example, *Circular 31/02-2-1 Selection of Test Vehicles* and *Circular 35/03-2-1 Selection of Test Vehicles* may both need to be updated.
- Finalising and publishing all necessary RVCS Forms to allow FCAI members to submit evidence of certification. RVCS Forms are required to be completed at least 6 months prior to the implementation date of the ADR. Recent experience demonstrates that this has not always been achieved. While there are administrative 'work-around' procedures, these add cost and administrative burden to both the Department's certification staff and industry.
- Begin issuing certification approvals at least 6 months prior to the implementation dates.

The actions required to be undertaken by industry, once a vehicle model design has been fixed, are outlined in summary in Table 4.1 below. A more detailed generic overview is included in Appendix B.

Table 4.1 Actions Required to Introduce a New Model to the Market

Time to Market	Actions
4+ years	<ul style="list-style-type: none"> • Design and development of the braking system to include BAS (and ESC if not already fitted to NA category vehicle). • Build of prototypes and installation in model prototype. • Initial calibration and laboratory testing.
3 years	<ul style="list-style-type: none"> • Undertake on-road calibration. • Undertake initial seasonal variation (i.e. winter/summer) testing.
2 years	<ul style="list-style-type: none"> • Finalise on-road calibration testing. • Additional seasonal variation testing.
1 year	<ul style="list-style-type: none"> • Confirm production preparation with system suppliers. • Build certification pre-production vehicles. • Undertake certification testing. • Undertake certification processes and receive certification approval. • Production build and distribution to market. Note: in many companies, production will not begin until certification approval has been received.

For both government and industry to successfully complete the actions required a minimum of 2 years from the date of registering the ADR to the implementation date for new vehicles is required. Taking into consideration the government also intends to mandate ESC for light commercial vehicles, the FCAI proposes the implementation timing of mandating BAS on light vehicles (category MA, MB, MC and NA), is not before;

- 1 November 2015 for new models.
- 1 November 2017 for all vehicles.

The implementation dates are based on the provisos the:

- technical content of the new ADR 31/03 and 35/04 are acceptable, and
- new ADR 31/03 and 35/04 will be registered on FRLI by 1 November 2013 (i.e. at least 2 years prior to 1 November 2015).

The implementation timing is necessary to provide lead-time for both government and industry and is not detrimental to safety as the industry is already supplying vehicles fitted with BAS (and ESC) and the fitting rate will continue to increase with the introduction of new models.

4.0 RECOMMENDED ADR

If the government still sees the need to mandate the fitting of BAS to MA, MB, MC and NA category vehicles the FCAI would recommend that this be achieved by amending ADRs 31/02 and 35/03 as follows:

- ADR 31/02:
 - Update to ECE R13-H, supplement 9 onwards.
 - Continue to allow NA category vehicles fitted with ESC and BAS to be certified to ADR 31/02.
- ADR 35/03:
 - Allow the technical requirements of Part III of EC 631/2009 (i.e. EC 78/2009) which includes the requirements for type approval of BAS for light commercial vehicles.
 - While ECE R13/11 provides for ESC fitted to N category vehicles it does not include BAS.

The FCAI appreciates the cooperative approach from the Department to work with the industry to draft the necessary changes to both ADR 31/02 and 35/03 and that the amendments are along the lines of the above recommendations.

The FCAI would also extend an offer to work with FCAI to update the other documentation such as the accompanying Circulars and RVCS Forms.

As previously noted the FCAI considers that the changes to the ADRs for both ESC for NA Category vehicles and BAS for all light (MA, MB, MC and NA category) vehicles should be undertaken at the same time with the same implementation timing.

5.0 CONCLUSION

The FCAI supports the fitting of important safety features such as BAS (and ESC) and its members have taken a pro-active approach with fitting BAS (and ESC) in the absence of regulation as new or upgraded models are released to the Australian market.

The RIS suggests that with fitting rates of BAS at 90 per cent for passenger cars and Sport Utility Vehicles (SUVs) and 45 per cent for LCVs. However, a more recent FCAI survey indicates that the fitting rate is currently above 70 per cent, expected to be over 90 per cent by the end of this year and will reach 100 per cent fitting rate between 2016 and 2018.

As such the FCAI does not see a need to regulate and mandate fitting of BAS to all light vehicles via an ADR.

However, if the government wishes to undertake this action, the FCAI considers the regulation needs to:

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APPENDIX A THE AUSTRALIAN AUTOMOTIVE INDUSTRY

The FCAI is the peak industry organisation representing vehicle manufacturers and importers of passenger vehicles, light commercial vehicles and motor cycles in Australia.

The automotive industry is a major contributor to Australia's lifestyle, economy and community and is Australia's largest manufacturing industry. The industry is wide-ranging and incorporates importers, manufacturers, component manufacture and distribution, retailers, servicing, logistics and transport, including activity through Australian ports and transport hubs.

The Australian automotive sector exported around \$3.3 billion in vehicles and components in 2011 and annual turnover in the industry exceeds \$160 billion. The industry directly employs almost 52,000 people through Australia's three vehicle manufacturers, dozens of importers and thousands of related component manufacturers. Further, the automotive industry employs nearly 280,000 people directly and indirectly throughout Australia. In 2011, around \$470,000 worth of product is generated per employee, a significant contribution to the Australian economy. The industry paid around \$3 billion in wages and salary in 2009/10 and since 2007 the industry has invested more than \$4.5 billion on research and development².

As the tariff barriers on automotive products have reduced from 57.5 per cent in the 1980's to between 3 and 4 per cent the number of vehicle brands and models in the Australian market has increased.

There are now over 67 brands in the Australian market, with just over 1.1 million new vehicle sales per year. That is a lot of brands to service a market of our size equating to only around 16,000 new vehicles sold per brand. The following table provides a comparison of the competitiveness of global markets with double the number of new vehicles sold per brand in Canada, almost three times as many in the UK and more the 255,000 new vehicles sold per brand in the USA.

Table A.1 Competitiveness of Global Vehicle Markets³

	Australia	Canada	UK	USA
No. of brands in market	67	49	53	51
Sales	1,112,032	1,620,221	2,249,483	13,040,632
Market size per brand	16,597	33,066	42,443	255,699

² Australian Government, Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, Key Automotive Statistics 2011.

³ Australian Government, Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education, March 2013 Automotive Update.

In 2012, only 13 per cent of new vehicles sold were manufactured locally with the remaining 87 per cent of new vehicles imported from many countries and regions of the world including Asia (more than 60 per cent), Europe (14 per cent), North and South America (3 per cent) and South Africa (3 per cent) (see Table A.2).

Table A.2 Country/Region of Origin for New Vehicle Sales in 2012⁴

Country/Region of Origin	% of New Vehicle Sales
Japan	35%
Thailand	15%
Europe	14%
Korea	13%
Australia	13%
Americas	3%
Other Asia (incl China and India)	3%
Other (incl South Africa)	3%

The motor vehicle is increasingly a global product and one of the most comprehensively regulated products. In considering regulations, the government's role is to balance social and economic benefits with safety and environmental performance.

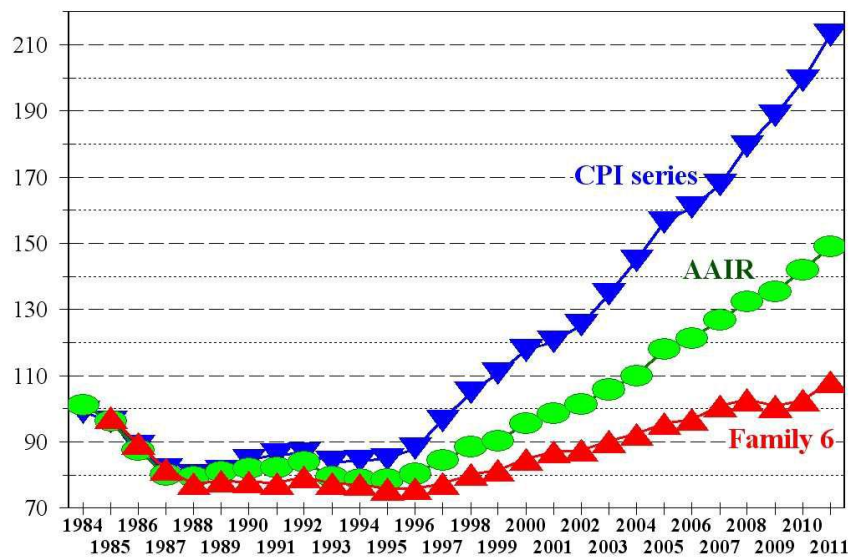
As economies of scale are critical in the automotive industry all manufacturers have tended to limit the number of locations any one model is produced and that model is then cross-shipped to markets where there is demand. This approach initially benefits the manufacturer through reducing costs and ultimately benefits the consumer by improving affordability and increasing product choice.

Australia is a small player with less than 1.5 per cent of the global build sold in this market. Consequently, Australia's ability to influence global design and investment is limited and as individual states are even a smaller proportion of the market and their ability to influence multi-national companies is correspondingly very limited.

It has become much easier to afford a new car since the mid-1990s, as earnings growth has exceeded the movements in motor vehicles prices. Figure A.1 shows the affordability of new passenger cars on three separate indices, CPI motor vehicle index, Australian Automotive Intelligence Report index and an index based on a 'Family 6' car.

⁴ FCAI, VFACTS National Report, New Vehicle Sales, December 2012.

Figure A.1 - Car Affordability Indexes⁵



Motor vehicles are more technologically advanced today than ever before. While the structural changes in the Australian market, in terms of lower tariffs and more brands, has resulted in significant consumer benefits with improved affordability and choice it has also greatly increased the knowledge base required of repairers. The industry has had to change to compete in this global market place and cannot slow the rate of adoption of these technologies, or limit consumer choice.

The expansion of new and global brands and models into the market has led to the introduction of advanced security, safety and environmental features in motor vehicles. The introduction of these features is in response to increasingly strict environmental regulations and growing demands from consumers for advanced security and safety features.

Vehicle brands face a range of de-facto regulations in the form of safety and environmental star ratings and buyer requirements. They face a range of competitive pressures to continually improve environmental performance and safety standards. For example, between 30 to 50 per cent of vehicle sales are to governments and fleets that frequently require a 5 star ANCAP rating and/or 4 star GVG rating.

⁵ Johns R, 2012, Australian Automotive intelligence 2012 Yearbook.

