

Availability of Autonomous Emergency Braking (AEB) in Australia. June 2018

Purpose

This document presents a status update on the availability of autonomous emergency braking (AEB) in the Australian new light vehicle (passenger cars, sports utility vehicles and light commercial vehicles) market.

The status of AEB is determined through an analysis of the light vehicle market at a particular point in time. This report presents the status of AEB availability as at March 2018.

Data sources

The analysis is based on vehicle specification information collected by ANCAP as part of its safety rating program, as well as publicly available vehicle specification information published by vehicle brands.

Sales data is used to estimate the market penetration of AEB. This data is sourced from the VFACTS National New Vehicle Sales Report, prepared by the Federal Chamber of Automotive Industries (FCAI).

Findings

In March 2018, sales of 369 vehicle models were reported by the VFACTS National New Vehicle Sales Report in Australia. The availability of AEB in the top 100 selling light vehicle models was investigated.

To further gauge the penetration of AEB, vehicle sales data was used to determine the portion of the market represented by the top 100 selling models.

Over the period January 2018 to March 2018, some 283,000 light vehicles were sold in Australia. The top 100 selling models accounted for approximately 251,000 sales – representing 89% of the light vehicle market.

Of the top 100 selling models in Australia at the end of March 2018:

- **35 were not available with any form of AEB.**
These models represent 29 per cent of the light vehicle market.
- **9 offered AEB as an option on the base grade variant.**
These models represent 11 per cent of the light vehicle market.
- **19 offered AEB only on higher grade variants. AEB was not available on the base variant.**
These models represent 18 per cent of the light vehicle market.
- **37 offered AEB available as standard equipment.**
These models represent 31 per cent of the light vehicle market.

The remaining models that were not investigated (those outside the top 100 selling models) represent 11 per cent of the light vehicle market.

TABLE 1:
Penetration of autonomous emergency braking (AEB)
in the Australian new light vehicle market
as at March 2018

AEB STATUS	NUMBER OF MODELS	MARKET SHARE
X = Not available	35	29%
O = Optional	9	11%
V = Available on higher variants	19	18%
S = Standard	37	31%
U = Unknown	269	11%
TOP 100 SELLING MODELS	100	89%
ALL MODELS	369	100%

Previous market snapshots

ANCAP has conducted market snapshots investigating the availability of AEB since December 2015. Over time, the number of vehicles fitted with AEB has increased as market demand builds, coupled with increasing maturity of the technology.

The results from each market snapshot over the period December 2015 to March 2018 are included in **Figure 1** and **Table 2** below.

FIGURE 1:
AEB Availability - National
(2015 to 2018)

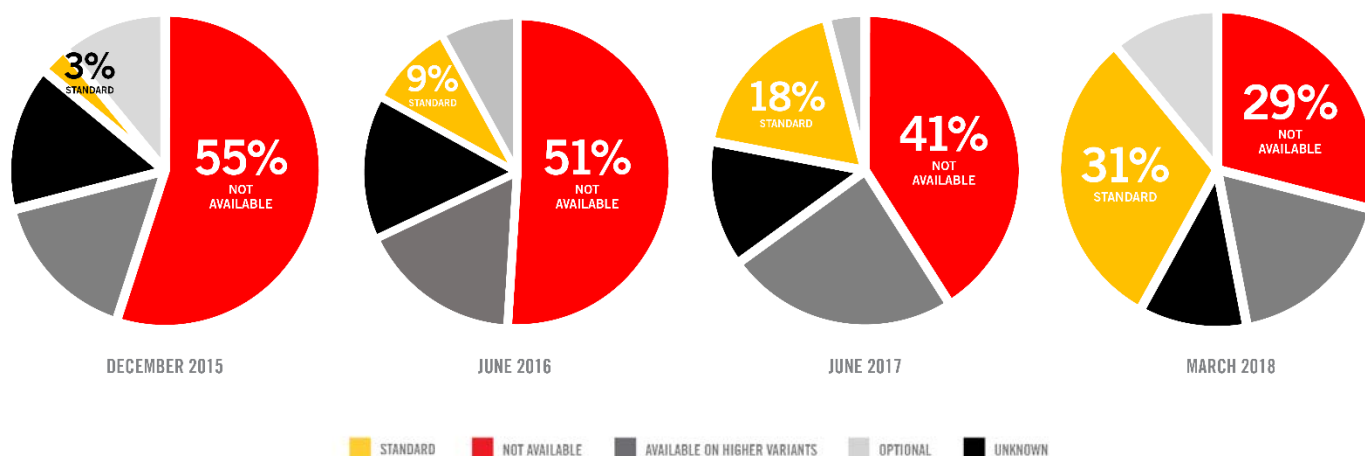


TABLE 2:
AEB Availability - National
(2015 to 2018)

AEB STATUS	December 2015		June 2016		June 2017		March 2018	
	NUMBER OF MODELS	MARKET SHARE	NUMBER OF MODELS	MARKET SHARE	NUMBER OF MODELS	MARKET SHARE	NUMBER OF MODELS	MARKET SHARE
X = Not available	67	55%	57	51%	45	41%	35	29%
O = Optional	11	11%	11	8%	8	4%	9	11%
V = Available on higher variants	16	16%	19	17%	26	24%	19	18%
S = Standard	6	3%	13	9%	21	18%	37	31%
U = Unknown	295	15%	253	15%	290	13%	269	11%
TOP 100 SELLING MODELS	100	85%	100	85%	100	87%	100	89%
ALL MODELS	395	100%	353	100%	390	100%	369	100%

Key observations:

- The number of top 100 selling models offered with AEB as standard increased from 6 models (3 per cent of the market) in 2015, to 27 models (31 per cent of the market) in 2018.
- The number of top 100 selling models offered without any form of AEB has decreased from 67 models (55 per cent of the market) in 2015, to 35 models (29 per cent of the market) in 2018.

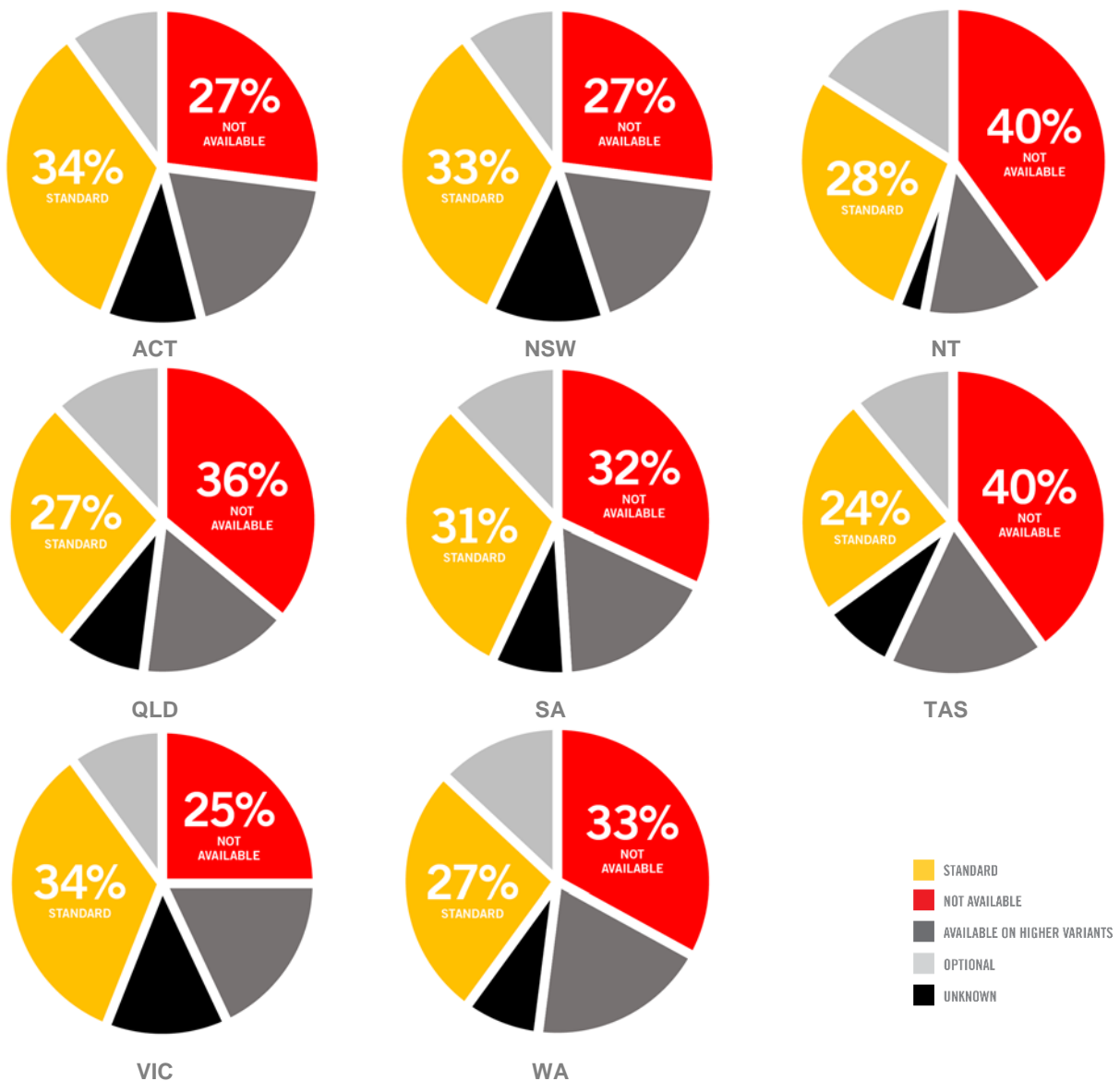
AEB availability by jurisdiction

The market snapshot investigating the availability of autonomous emergency braking conducted on a national basis can be repeated on a jurisdictional basis. Equivalent analysis of AEB market share was therefore also performed for individual state and territory jurisdictions as at March 2018.

Due to the nature of the Australian market, variations presented in the individual jurisdictions are due to buyer preference and not due to vehicle specification. That is, the availability of AEB - through vehicle specification - within a model range does not differ between each jurisdiction, but the popularity of models and therefore the models included in the analysis does vary.

The March 2018 findings on a jurisdictional basis are shown in **Figure 2** below.

FIGURE 2:
AEB Availability – by jurisdiction
(March 2018)



Limitations

- Vehicles investigated were new vehicles from manufacturers / importers whose sales are reported as part of the VFACTS National New Vehicle Sales Report as of March 2018. There are vehicle sales which are not reported by VFACTS. It is understood that such sales equate to a relatively small volume.
- The analysis focusses on the top 100 selling models in Australia. There are 369 models reported by VFACTS. Sales data for those outside the top 100 selling models shows that these 269 models represent 11% of the market in terms of sales volume.
- The availability status of AEB on models has been determined through the model information collected by ANCAP as part of its safety rating program, as well as specification information published by vehicle brands. It is possible that AEB may be available on a model, however the safety feature is not promoted by the brand. In such a case, the availability of AEB may have been classified as not available. It is expected that such cases are unlikely.
- The requirements for a system being considered a form of AEB were based on a functional definition of the technology. No further assessments of the technologies have been made as part of this exercise. It should be noted that as system effectiveness and reliability information is collected through ANCAP's performance testing, it will be possible for future analyses to report on system types in greater detail. The functional definition of AEB is as follows:
 - Autonomous: the system acts independently of the driver to avoid or mitigate the accident.
 - Emergency: the system will intervene only in a critical situation.
 - Braking: the system applies braking to avoid or mitigate potential collisions.
- Generally, where AEB is available on the lowest specification variant it is also offered on higher grade variants within the model range, however there are some scenarios where this is not the case.

Definitions

AEB STATUS:	The availability of autonomous emergency braking (AEB) within a model range.
NONE:	AEB is not available on any variant within the model range.
OPTIONAL:	AEB is available as an option on at least the lowest specification variant. It may be standard on higher specification variants.
HIGHER VARIANT:	AEB is not available on the lowest specification variant of a model range however it is available on higher specified variants either as an option or as standard equipment.
STANDARD:	AEB is available as standard on the lowest specification variant.