



ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

Autonomous Emergency Braking

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Euro NCAP

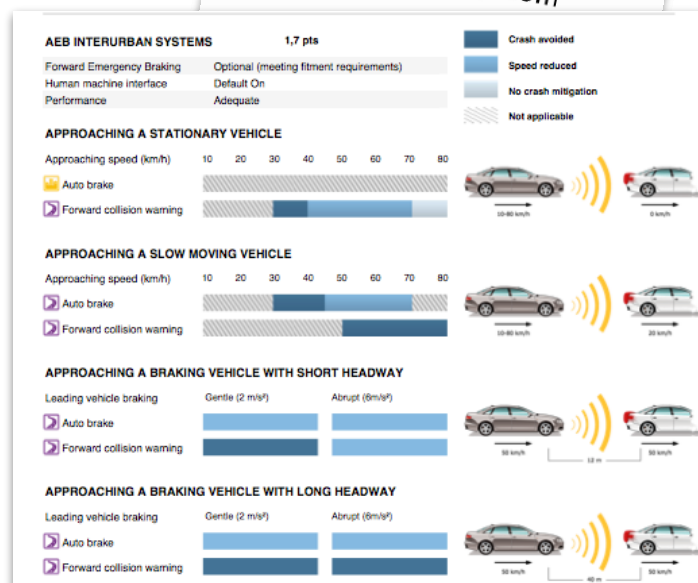
- Euro NCAP published the protocol for car-to-car AEB tests in 2013
- AEB assessment included in Safety Assist assessment from 2014
- Test results published in datasheets
- Difficult to earn 5 stars without AEB



ANCAP

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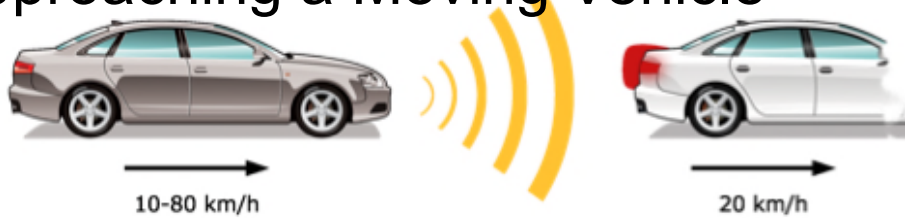
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Approaching a Stationary Vehicle



Approaching a Moving Vehicle



Approaching a Braking Vehicle (close)



Approaching a Braking Vehicle (far)



Pedestrians and other vulnerable road users (VRU AEB)

					
Scenario name	Walking elderly crosses from far-side	Running adult crosses from far-side	Walking adult crosses from near-side 25%*	Walking adult crosses from near-side 75%*	Walking child crosses from near-side behind obstruction
Pedestrian velocity	3 kph	8 kph	5 kph	5 kph	5 kph
Vehicle velocity	20-60 kph	20-60 kph	10-50 kph	10-50 kph	20-60 kph
Obstruction	no	no	no	no	yes
Impact position*	50 % (center)	50 % (center)	25% (near-side)	75% (off-side)	50 % (center)
Weighting	1	1	1	1	1

Pedestrians and other vulnerable road users (VRU AEB)



Test facilities - Moving Vehicle Tests

- Speed control and distance control for both vehicles
- Target “vehicle” that looks like a real car to the AEB system
- Towing system to simulate a real vehicle and minimise damage if a collision occurs
- Long, flat test area



Australian AEB Research

- In 2012 CASR conducted an evaluation of the potential safety benefits of “forward collision avoidance technology” (FCAT) for Austroads.
- AEB was the major technology evaluated
- Report published in April 2012
- Major benefits for Australia



ANCAP and AEB

- Has been an optional SAT since 2011
- 2012 Road Map introduced a pedestrian rating concession for vehicles with Pedestrian AEB (e.g. marginal protection instead of acceptable or good, if pedestrian AEB fitted)
- Monitoring developments in Europe, USA and Japan
- From 2015 republished Euro NCAP ratings will need the same AEB as the European model to meet Safety Assist requirements for 5 stars
- ANCAP ratings are the same as Euro NCAP from 2018 and so AEB will be strongly encouraged

