Safer Vehicles and Consumer Ratings
MALAYSIA - MAY 2012

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NCAP History

1979
1992
1995
1997
1999
2010
2012
ANCAP Crash Tests

Three types of crash test give a front occupant protection rating out of 5 stars

5-star vehicles are available in all categories

Cars
SUVs
Commercials
From July 2011 all cars purchased by the Australian government must have a 5-star ANCAP rating and all light commercial vehicles must have at least a 4-star rating (no exemptions!)

Australasia now has 5-star vehicles in all vehicle market segments including VW Amarok, Ford Ranger and Mazda BT50 pick-ups and Mercedes Vito van
"If all young drivers involved in crashes were driving the safest car available, rather than the cars they usually drove, the road fatality and serious injury rate could be reduced by more than 80 per cent." (MUARC 2009)

4 OUT OF 5 WOULD NOT HAVE DIED
ANCAP ROAD MAP

- Rolling 5 year plan
- Raises the bar for each star rating - including minimum requirements for pedestrian, whiplash & roof strength
- Encourages uptake of a wide range of Safety Assist Technologies (SAT) - both passive and active
- Developed in consultation with the auto industry, including annual reviews
Pedestrian Protection Tests

A result of at least "marginal" is required for an ANCAP 5-star safety rating from 2012 (some concessions).

<table>
<thead>
<tr>
<th>Pedestrian Score</th>
<th>Descriptive rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5 or more</td>
<td>Good</td>
</tr>
<tr>
<td>18.5 to 27.49</td>
<td>Acceptable</td>
</tr>
<tr>
<td>9.5 to 18.49</td>
<td>Marginal</td>
</tr>
<tr>
<td>9.49 or less</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Whiplash Protection

ANCAP member NRMA Insurance already rates whiplash protection for Australian vehicles using the IIWPG (RCAR) protocol. A result of at least “acceptable” required for an ANCAP 5-star rating from 2012.
Roof Strength Rating

Australia has a similar rollover problem to the USA. IIHS roof strength rating is being introduced.

A result of at least “marginal” (SWR >=2.5) required for an ANCAP 5-star rating from 2014.

EXAMPLES OF SAFETY ASSIST TECHNOLOGIES (SAT)

Each counts as 1 SAT if standard, 0.5 SAT if optional

Scientific American 2008
Example:  

A N C A P  
Rated ★★★★★

12.5 pt or more in offset & side impact
1pt or more in pole test, 32.5 or more overall plus...

<table>
<thead>
<tr>
<th>Year</th>
<th>&quot;Mandatory SAT&quot; ¹</th>
<th>Minimum number of &quot;Additional SAT&quot; items²</th>
<th>Minimum Pedestrian Rating *</th>
<th>Minimum Whiplash Rating</th>
<th>Minimum Roof Strength Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>ESC, 3PSB, HPT front seats</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2012</td>
<td>&quot;</td>
<td>2</td>
<td>Marginal</td>
<td>Acceptable</td>
<td>-</td>
</tr>
<tr>
<td>2013</td>
<td>2012 + SBR front seats, EBA</td>
<td>3</td>
<td>Marginal</td>
<td>Acceptable</td>
<td>-</td>
</tr>
<tr>
<td>2014</td>
<td>2013 + HPT 2nd row seats</td>
<td>4</td>
<td>Acceptable</td>
<td>Good</td>
<td>Marginal SWR &gt;= 2.5</td>
</tr>
<tr>
<td>2015</td>
<td>2014 + SBR 2nd row fixed seats</td>
<td>5</td>
<td>Acceptable</td>
<td>Good</td>
<td>Marginal SWR &gt;= 2.5</td>
</tr>
</tbody>
</table>

* High seat vehicles - marginal pedestrian protection from 2014

INTERNATIONAL ACTIVITIES

- **Japan** - 2010: ANCAP crash test of Mitsubishi i-MiEV conducted at JARI in conjunction with a joint NCAP meeting.
- **Australia** - 2010: MIROS visitors observe ANCAP crash tests and discuss protocols.
- **Malaysia** - 2011: ANCAP representatives attend ASEAN NCAP meeting.
- **Australia** - 2012: ASEAN NCAP meeting & crash test
POTENTIAL BENEFITS

SAFE SYSTEMS APPROACH

CONSIDERABLE OVERLAP
POTENTIAL BENEFITS

SAFER VEHICLES COULD PREVENT ABOUT 2/3RDS OF SERIOUS/FATAL CASUALTIES

TYPES OF VEHICLE COUNTERMEASURES

(Actual proportions will depend on Region)
POTENTIAL BENEFITS
COMPONENTS OF THE ANCAP ROAD MAP

ROOF STRENGTH RATING
WHIPLASH RATING
CRASH TEST RATING

SAT
PEDESTRIAN RATING

COMPONENTS OF THE ANCAP ROAD MAP

RECOMMENDED PRIORITIES FOR SAFER VEHICLES

BLACK BOX RECORDER (e.g. PAY-HOW-YOU-DRIVE-INSURANCE)
INTELLIGENT SPEED ASSISTANCE (ISA)
ABS & ELECTRONIC STABILITY CONTROL
EMERGENCY BRAKE ASSIST & ELECTRONIC BRAKE DISTRIBUTION
AUTONOMOUS EMERGENCY BRAKING (AEB)
DAYTIME RUNNING LIGHTS

GOOD PEDESTRIAN PROTECTION

DUAL FRONT AIRBAGS
GOOD OFFSET TEST PERFORMANCE
SEAT BELT REMINDERS
HEAD-PROTECTING SIDE AIRBAGS
3-POINT SEAT BELTS FOR ALL SEATS
STRONG ROOF

SAFER SPEEDS
CRASH AVOIDANCE
OCCUPANT PROTECTION
VULNERABLE USER PROTECTION
Thank you