New Car Assessment Program for South East Asia Region

AAI Summit
25 November 2013
Grand Inna Kuta, Bali
Established on 3rd January 2007, MIROS functions as a one-stop centre for the generation and dissemination of road safety information through the print media and a concerted training programme. MIROS carries out studies and evaluates current procedures on road safety to generate information that will form the core of its evidence-based intervention programmes to enhance road safety.

**Vision**
To emerge as a world leader in road safety research

**Mission**
To foster the science and art of road safety interventions
Functions

• Conduct high impact research that will be translated into road safety policies.
• Develop national objectives, policies, and priorities for the orderly development and administration of road safety research.
• Enhance and increase knowledge based on new developments in issues related to road safety.
• Serve as an audit and accreditation agency in curriculum design and standards on road safety.
• Propose evidenced based cost-effective interventions/programmes.
• Serve as a repository of knowledge and linkage on road safety.
• Serve as a centre providing consultation and advice on road safety issues.
Director-General’s Office

- Road User Behavioural Change Research Center
- Vehicle Safety And Biomechanics Research Centre
- Road Safety Engineering And Environment Research Centre

General Inquiries: aseancap@gmail.com
The Decade was approved by the Moscow Ministerial in 2009 and UN General Assembly in 2010. It was launched by a global relay of events on 11th May. A Plan for the Decade has been prepared based on five pillars:

1. Building Management Capacity
2. Encouraging Safer User Behaviour
3. Building Safer Roads
4. Building Safer Vehicles
5. Improving Post Crash Care

Each pillar includes indicative and interim targets to progress towards the Decade’s overall goal which is to ‘stabilize and then reduce the level of road fatalities’. This requires a 50% reduction in the forecast level of fatalities by 2020 which could avoid 5 million deaths, 50 million injuries and save $3 trillion in social costs.
Activity 1: Encourage Member States to apply and promulgate motor vehicle safety standards as developed by the UN's World Forum for the Harmonization of Vehicle Regulations (WP 29).

Activity 2: Encourage implementation of new car assessment programs in all world regions to increase the availability of consumer information about the safety performance of motor vehicles.

Activity 3: Encourage agreement to ensure that all new motor vehicles are equipped with seat belts and anchorages that meet regulatory requirements and pass applicable crash test standards (as minimum safety features).

Activity 4: Encourage global deployment of crash avoidance technologies with proven effectiveness such as Electronic Stability Control and Anti Lock Braking systems in motorcycles.

Activity 5: Encourage use of fiscal and other incentives for motor vehicles that provide high levels of road user protection and discourage export of new and used cars that have reduced safety standards.

Activity 6: Sustain investment in research and development of safety technologies that will improve vehicle safety and reduce risks to vulnerable road users.

Activity 7: Encourage managers of governments and private sector fleets to purchase and maintain vehicles that offer advanced safety technologies and high levels of occupant protection.
Progress of ASEAN NCAP

- 15th September 2011, Kuala Lumpur
  - ASEAN NCAP Kick Off Meeting.
  - Agreed to sign MOU between partners on 7th December 2011 in Delhi, India.
  - Technical review and discussion of protocols.
Progress of ASEAN NCAP

• 7th ~ 8th December 2011
  – MOU Signing between MIROS & GLOBAL NCAP on collaboration.
  – MOU Signing between partners; MIROS, AAM, AAS, AAP, ANCAP & GLOBAL NCAP for ASEAN NCAP establishment
Progress of ASEAN NCAP

- 23rd March 2012, Malacca, Malaysia
  - 4th ASEAN NCAP Steering Committee
  - Endorsing all related protocols including vehicle selection.
  - First time attended by Indonesia (IMI), Thailand (TGGS) & Vietnam (VR).
  - Grant Agreement signing between Global NCAP & MIROS
## NCAPs around the world

<table>
<thead>
<tr>
<th>Continent</th>
<th>Program Name</th>
<th>Label</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA</td>
<td>China New Car Assessment Program</td>
<td>C-NCAP</td>
<td>• China</td>
</tr>
<tr>
<td></td>
<td>Acronym: C-NCAP</td>
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<td></td>
<td>Japan New Car Assessment Program</td>
<td>JNCAP</td>
<td>• Japan</td>
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<td>Acronym: JNCAP</td>
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<td>Korean New Car Assessment Program</td>
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<td>Australasian New Car Assessment Program</td>
<td>ANCAP</td>
<td>• Australia</td>
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<td>• Italy</td>
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<td></td>
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<td>• Spain (Catalonia)</td>
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<td>• Sweden</td>
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<td>• The Netherlands</td>
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<td>• UK</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• European region as a whole</td>
</tr>
<tr>
<td>NORTH AMERICA</td>
<td>Insurance Institute for Highway Safety – Vehicle Ratings</td>
<td>US IIHS</td>
<td>• USA</td>
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<td></td>
<td>New Car Assessment Program (NHTSA³)</td>
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<td>• USA</td>
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<td>Established 1978</td>
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</tbody>
</table>

First Test – 24<sup>th</sup> May 2012
Support from Related Parties

Stake Holders

Financial Support

Technical Support

Program Advisory

General Inquiries: aseancap@gmail.com
Steering Committee
(MIROS, AAM, AAS, AAP & AAC) + (Global NCAP, Latin NCAP & Australasian NCAP – Advisory Panel)

Technical Committee
(MIROS, TGGS, UOP, Latin NCAP & ANCAP)

WG
Frontal Impact

WG
Side Impact

WG
Child Restraint

WG
Safety Assist
Vehicle involved in Phase 1

- **FORD FIESTA**
- **HONDA CITY**
- **TOYOTA VIOS**
- **NISSAN MARCH**
- **PERODUA MYVI**
- **HYUNDAI i10**
- **PROTON SAGA**

*Start Date: 15th November 2012
*Last test: 29th January 2013
PC3 Top View

Impact Point

120 m

Shooting Range

Soaking Room
Support from Related Parties

Financial Support

Technical Support

Product Support
### Phase 1 Result

#### ADULT OCCUPANT PROTECTION

<table>
<thead>
<tr>
<th>Car Model</th>
<th>Rating</th>
</tr>
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<tbody>
<tr>
<td><strong>FORD Fiesta</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>HONDA City</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>TOYOTA Vios</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>NISSAN March</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>PROTON Saga FLX+</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>PERODUA Myvi</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>HYUNDAI i10</strong></td>
<td>2</td>
</tr>
<tr>
<td><strong>PROTON Saga</strong></td>
<td>1</td>
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#### CHILD OCCUPANT PROTECTION

<table>
<thead>
<tr>
<th>Car Model</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HONDA City</strong></td>
<td>81%</td>
</tr>
<tr>
<td><strong>FORD Fiesta</strong></td>
<td>66%</td>
</tr>
<tr>
<td><strong>PROTON Saga FLX+</strong></td>
<td>58%</td>
</tr>
<tr>
<td><strong>PERODUA Myvi</strong></td>
<td>54%</td>
</tr>
<tr>
<td><strong>PROTON Saga</strong></td>
<td>49%</td>
</tr>
<tr>
<td><strong>HYUNDAI i10</strong></td>
<td>48%</td>
</tr>
<tr>
<td><strong>NISSAN March</strong></td>
<td>48%</td>
</tr>
<tr>
<td><strong>TOYOTA Vios</strong></td>
<td>48%</td>
</tr>
</tbody>
</table>
Variant: LX Ti-VCT Automatic
Year Built: 2012
Model Year: 2011
Vehicle Category: 4-door Sedan
Engine Capacity: 1.6 Litre Petrol
Kerb Mass: 1147 kg
Test Laboratory: MIROS PC3

Production of Thailand
Pre-requisite for 5-Star in ASEAN NCAP:
Electronic Stability Control – YES
Seatbelt Reminder – YES (Driver & Front Passenger)

This car is eligible for maximum 5-star.
All Ford Fiesta is produced in Thailand and Ford offers a variant with driver airbag only for ASEAN market except Malaysia. This model is not available for Singapore and Myanmar. Only vehicle with at least double airbags, ESC and Seat belt reminder for frontal occupant is eligible to claim for 5 stars ASEAN NCAP ratings.

<table>
<thead>
<tr>
<th>Dummy</th>
<th>P3</th>
<th>P1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment</td>
<td>ISOFIX and Seat Belt</td>
<td>ISOFIX</td>
</tr>
<tr>
<td>Brand of CRS</td>
<td>Britax Duo Plus [FORD]</td>
<td>Britax Baby Safe Plus SHR II [FORD]</td>
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<tr>
<td></td>
<td></td>
<td>Britax Baby-safe ISOFIX base</td>
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</table>

**CRS Assessment**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dynamic Test</strong></td>
<td>17.39 / 24</td>
</tr>
<tr>
<td><strong>CRS Based Assessment</strong></td>
<td>12 / 12</td>
</tr>
<tr>
<td><strong>Vehicle Based Assessment</strong></td>
<td>3/13</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>32.39/49</td>
</tr>
<tr>
<td><strong>Compliance Percentage</strong></td>
<td>66.10%</td>
</tr>
</tbody>
</table>

*For P3, the test was conducted using seat belt and ISOFIX attachment due to the unavailability of top tether anchorage point. Ford will introduce top tether to all ISOFIX applications in ASEAN Fiesta no later than 20th May 2013. Predicted calculation of CRS assessment using top tether would end up to minimum 10% increment from previous scoring.*

Model year refers to the latest changes of safety package for each variant.
Variant: Grade S  
Year Built: 2012  
Model Year: 2012  
Vehicle Category: 4-door Sedan  
Engine Capacity: 1.6 Litre Petrol  
Kerb Mass: 1142 kg  
Test Laboratory: MIROS PC3  

Production of Malaysia
**Pre-requisite for 5-Star in ASEAN NCAP:**
Electronic Stability Control – YES*
Seatbelt Reminder – YES* (Driver & Front Passenger)
This car is eligible for maximum 5-star.

*Honda equipped City model with double airbags all over Southeast Asia region. From the changes started 30th January 2013 in all over Southeast Asian HONDA production, there will be two choices of Low and High grade of HONDA City. High End grade of Honda City is eligible for ASEAN NCAP 5 stars rating starting from the said date.

### Dummy

<table>
<thead>
<tr>
<th></th>
<th>P3</th>
<th>P1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment</td>
<td>ISOFIX and Top Tether</td>
<td>ISOFIX</td>
</tr>
</tbody>
</table>

**CRS Assessment**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Dynamic Test</td>
<td>21.79 / 24</td>
<td></td>
</tr>
<tr>
<td>CRS Based Assessment</td>
<td>12 / 12</td>
<td></td>
</tr>
<tr>
<td>Vehicle Based Assessment</td>
<td>6 / 13</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>39.79/49</strong></td>
<td></td>
</tr>
<tr>
<td>Compliance Percentage</td>
<td>81.20%</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL SCORE**

15.44 / 16.00

**Modifier:**
No Modifier

Model year refers to the latest changes of safety package for each variant.
Vehicle involved in Phase 2

- TOYOTA PRIUS
- HONDA CIVIC
- SUBARU XV
- SUZUKI SWIFT
- MAZDA 2
- MITSUBISHI MIRAGE
- TOYOTA AVANZA
- PERODUA ALZA
- NISSAN ALMERA
- DAIHATSU XENIA
- MITSUBISHI PAJERO SPORT

*Start Date: 18\textsuperscript{th} April 2013
*Last test: 2\textsuperscript{nd} August 2013

General Inquiries: aseancap@gmail.com
Phase I & II Results
[Adult Occupant Protection]

**Phase I**
- Ford Fiesta 5★
- Honda City 5★
- Toyota Vios 4★
- Nissan March 4★
- Proton Saga SV 3★
- Perodua Myvi 3★
- Hyundai i10 2★
- Proton Saga FLX 1★

**Phase II**
- Toyota Prius 5★
- Honda Civic 5★
- Subaru XV 5★
- Suzuki Swift 4★
- Mazda 2 4★
- Mitsubishi Mirage 4★
- Toyota Avanza 4★
- Perodua Alza 4★
- Nissan Almera 4★
- Daihatsu Xenia 4★
- Mitsubishi Pajero Sport 4★

General Inquiries: aseancap@gmail.com
Phase I & II Results
[Child Occupant Protection]

**Phase I**
- **Honda City**: 81%
- **Ford Fiesta**: 66%
- **Perodua Myvi**: 54%
- **Proton Saga SV**: 49%
- **Hyundai i10**: 48%
- **Nissan March**: 48%

**Phase II**
- **Toyota Prius**: 86%
- **Honda Civic**: 82%
- **Mazda 2**: 78%
- **Suzuki Swift**: 77%
- **Subaru XV**: 67%
- **Nissan Almera**: 52%
- **Perodua Alza**: 46%
- **Mitsubishi Mirage**: 43%
- **Pajero Sport**: 40%
- **Toyota Avanza**: 38%
- **Daihatsu Xenia**: 33%
We moved the baseline

- **Toyota VIOS** – upgraded all variants to double airbags starting September 2012
- **Honda City** – New column pad cover, SBR for both front passenger; create ASEAN safety specification for low and high grade.
- **Nissan March** – New column pad cover for whole ASEAN region
- **Ford Fiesta** – Implementation of top tether for all ISOFIX application starting 20th May 2013.
- **Proton SAGA** - Production of variant with single airbag was stopped in February 2013. Lowest variant is now equipped with double airbags and top tether.
- **Daihatsu Xenia** – 1st to offer variant option of either airbag or radio.
### Sales Data 2012 (ASEAN Top 20)

#### Volume

- **~250,000 u**
  - **Pick Up**: Toyota HILUX
  - **Sedan**: Toyota VIOS
  - **Small Car**: Proton SAGA
  - **MPV**: Perodua MYVI
  - **SUV**: Toyota INNOVA

- **~200,000 u**
  - **Pick Up**: Toyota HILUX
  - **Sedan**: Toyota VIOS
  - **Small Car**: Proton SAGA
  - **MPV**: Perodua MYVI
  - **SUV**: Toyota INNOVA

- **~150,000 u**
  - **Pick Up**: Toyota HILUX
  - **Sedan**: Toyota VIOS
  - **Small Car**: Proton SAGA
  - **MPV**: Perodua MYVI
  - **SUV**: Toyota INNOVA

- **~100,000 u**
  - **Pick Up**: Toyota HILUX
  - **Sedan**: Toyota VIOS
  - **Small Car**: Proton SAGA
  - **MPV**: Perodua MYVI
  - **SUV**: Toyota INNOVA

- **~50,000 u**
  - **Pick Up**: Toyota HILUX
  - **Sedan**: Toyota VIOS
  - **Small Car**: Proton SAGA
  - **MPV**: Perodua MYVI
  - **SUV**: Toyota INNOVA

**General Inquiries:** aseancap@gmail.com
### Dual Airbags + ABS

#### Availability across variants

- **All variants**
- **All except the lowest variant**
- **Some of the variants**
- **Only the highest variant**
- **None at all**
### Dual Airbags + ABS

<table>
<thead>
<tr>
<th>Car</th>
<th>Airbags</th>
<th>ABS</th>
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</thead>
<tbody>
<tr>
<td>Toyota Avanza</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Daihatsu Xenia</td>
<td>✔️ ✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Toyota Innova</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Suzuki Ertiga</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Nissan Livina</td>
<td>✔️ ✔️</td>
<td>✔️</td>
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</table>

<table>
<thead>
<tr>
<th>Car</th>
<th>Airbags</th>
<th>ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toyota Hilux</td>
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<td>✗</td>
</tr>
<tr>
<td>Isuzu D-Max</td>
<td>✔️ ✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Toyota Vios</td>
<td>✔️ ✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Honda City</td>
<td>✔️ ✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Mitsubishi Triton</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Phase 1</td>
<td>Phase 2</td>
<td>Phase 3</td>
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</tr>
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<td>ODB 64: 40% offset</td>
<td>ODB 64: 40% offset</td>
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<tr>
<td>5 star pre-requisite [ESC &amp; SBR Frontal]</td>
<td>5 star pre-requisite [ESC &amp; SBR Frontal]</td>
<td><strong>5 star pre-requisite</strong> [ESC &amp; SBR Frontal &amp; Side Impact R95 (to be tested at ASEAN NCAP certified lab)]</td>
</tr>
<tr>
<td></td>
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<td><strong>4 star pre-requisite</strong> – Side Impact R95 to be tested at ASEAN NCAP certified lab.</td>
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