

Safer cars for ASEAN region

## New Car Assessment Program for South East Asia Region

AAI Summit 25 November 2013 Grand Inna Kuta, Bali

















# Malaysian Institute of Road Safety Research (MIROS)

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

# General inquiries: <u>aseancap@gmail.com</u>



#### **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.

Road User Behavioural Change Research Center

Vehicle Safety And Biomechanics Research Centre

Road Safety Engineering And Environment Research Centre



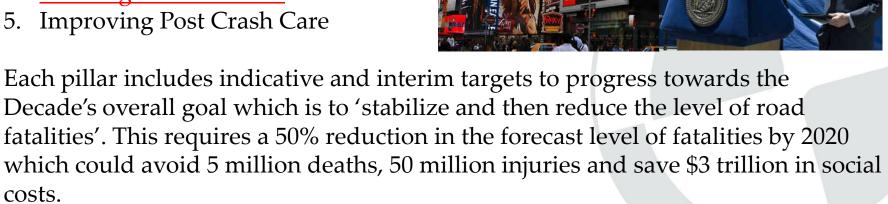


#### **UN Decade of Action for Road Safety – May 11 2011**

DECADE OF ACTION FOR

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:

- **Building Management Capacity**
- **Encouraging Safer User Behaviour**
- **Building Safer Roads**
- **Building Safer Vehicles**
- Improving Post Crash Care







#### Decade Plan - Influencing Vehicle Design

<u>Activity 1</u>: 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.

<u>Activity 3</u>: 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)..

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

<u>Activity 5</u>: 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.

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

<u>Activity 7</u>: 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

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







# Progress of ASEAN NCAP

- 7<sup>th</sup> ~ 8<sup>th</sup> 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

- 23<sup>rd</sup> March 2012, Malacca, Malaysia
  - 4<sup>th</sup> 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

Continent	Program Name	Label	Countries
	China New Car Assessment Program Acronym: C-NCAP	C-NCAP	• China
ASIA	Japan New Car Assessment Program Acronym: JNCAP Established 1991	JUCUS	• Japan
	Korean New Car Assessment Program Acronym: KNCAP Established 1999	<b>♦</b> KNCAP	Korea
AUSTRALIA	Australasian New Car Assessment Program Acronym: ANCAP Established 1992	A N C A P Crash heling for unitry ANYMANA NEW AND AND ANYMANA NEW	Australia     New Zealand
EUROPE	European New Car Assessment Program Acronym: Euro NCAP Established 1997	EURO NCAP	<ul> <li>France</li> <li>Germany</li> <li>Italy</li> <li>Spain (Catalonia)</li> <li>Sweden</li> <li>The Netherlands</li> <li>UK</li> <li>European region as a whole</li> </ul>
NORTH	Insurance Institute for Highway Safety – Vehicle Ratings Acronym: US IIHS	INSURANCE INSTITUTE FOR HIGHWAY SAFETY	• USA
AMERICA	New Car Assessment Program (NHTSA <sup>3</sup> ) Acronym: US NCAP Established 1978	NHTSA www.ahtsa.gov	• USA
SOUTH AMERICA	Latin American & Caribbean New Car Assessment Program Acronym: Latin NCAP	LATIN	<ul> <li>Latin America and Caribbean region as a whole</li> </ul>



First Test – 24<sup>th</sup> May 2012



#### Support from Related Parties











Stake Holders





Financial Support







Technical Support





Program Advisory



# ASEAN NCAP Organization Chart

#### **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

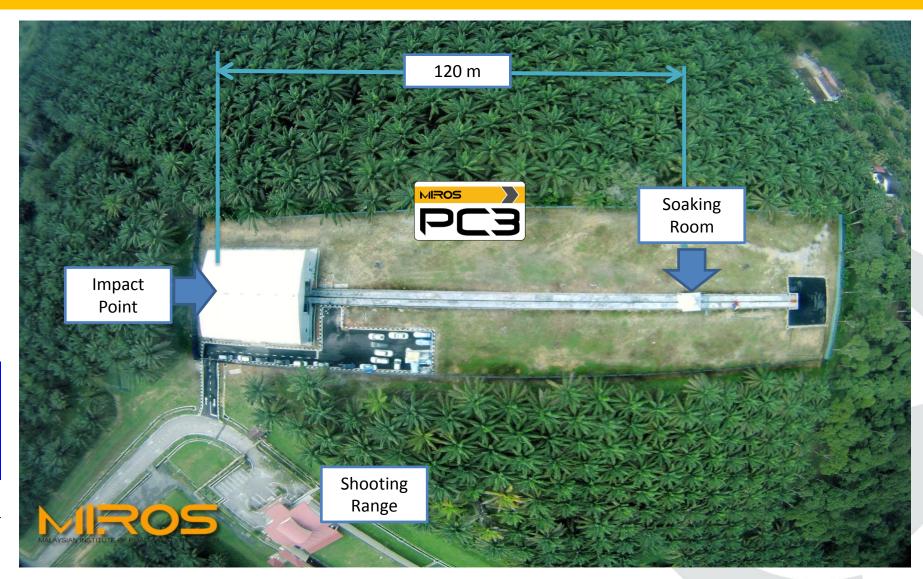


# Test Laboratory: MIROS PC3





# PC3 Top View





### Support from Related Parties





Financial Support



Technical Support





Product Support



# Phase 1 Result

#### ADULT OCCUPANT PROTECTION

**FORD Fiesta** 



HONDA City



**CHILD OCCUPANT PROTECTION** 

66%

**HONDA City** 





PROTON Saga FLX+

**FORD Fiesta** 



CHILD OCCUPANT PROTECTION 58%

81%

TOYOTA Vios







CHILD OCCUPANT PROTECTION 54%

49%

**NISSAN March** 



ADULT OCCUPANT PROTECTION



PROTON Saga FLX+







**PROTON Saga** 



CHILD

48%

PERODUA Myvi



NISSAN March

CHILD OCCUPANT PROTECTION

48%

**HYUNDAI i10** 



**PROTON Saga** 





CHILD

**4**8%



#### **FORD Fiesta**

**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





# General inquiries: <u>aseancap@gmail.com</u>



#### FORD Fiesta

#### *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.







**Modifier:** *No Modifier* 

TOTAL SCORE

15.73 / 16.00



Dummy	P3	P1.5	
Attachment	ISOFIX and Seat Belt	ISOFIX	
Brand of CRS	Britax Duo Plus [FORD]	Britax Baby Safe Plus SHR II [FORD] Britax Baby-safe ISOFIX base	

CRS Assessment		
Dynamic Test*	17.39 / 24	
CRS Based Assessment	12 / 12	
Vehicle Based Assessment	3/13	
TOTAL	32.39/49	
Compliance Percentage	66.10%	

\*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.



#### HONDA City

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







#### HONDA City

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 30<sup>th</sup> 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	Р3	P1.5		
Attachment	ISOFIX and Top Tether	ISOFIX		
Brand of CRS	Britax Duo Plus [HONDA Genuine ISOFIX CRS]	Britax Baby Safe Plus SHR II [HONDA Genuine ISOFIX CRS] Britax Baby-safe ISOFIX base		
CRS Assessment				
Dynamic Test		21.79 / 24		
CRS Based Assessment		12 / 12		
Vehicle Based Assessment		6/13		
TOTAL		39.79/49		
Compliance Percentage		81.20%		









**Modifier:** No Modifier

**TOTAL SCORE** 

15.44 / 16.00

Model year refers to the latest changes of safety package for each variant.



#### Vehicle involved in Phase 2

TOYOTA PRIUS SUBARU XV SUZUKI SWIFT MITSUBISHI MIRAGE PERODUA ALZA **NISSAN ALMERA** DAIHATSU XENIA MIRSUBISHI PAJERO SPORT

General inquiries: aseancap@gmail.com



# Phase I & II Results [Adult Occupant Protection]

#### PHASE I

#### PHASE II

FORD FIESTA 5★
HONDA CITY 5 ★

TOYOTA VIOS 4

TOYOTA PRIUS 5★

HONDA CIVIC 5 >

SUBARU XV 5

SUZUKI SWIFT 4 💢

MAZDA 2 4×

MITSUBISHI MIRAGE

TOYOTA AVANZA 4>

PERODUA ALZA 47

NISSAN ALMERA

DAIHATSU XENIA 4 🥦

MITSUBISHI PAJERO SPORT 4

NISSAN MARCH

PROTON SAGA SV 3 💢

PERODUA MYVI 3 🖈

**HYUNDAI i10** 

2 🌟

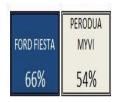
PROTON SAGA FLX

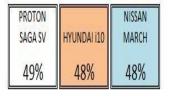


# Phase I & II Results [Child Occupant Protection]

















50.00	PERODUA	MITSUBISHI	PAJERO	TOYOTA	DAIHATSU
	ALZA	MIRAGE	SPORT	AVANZA	XENIA
	46%	43%	40%	38%	33%



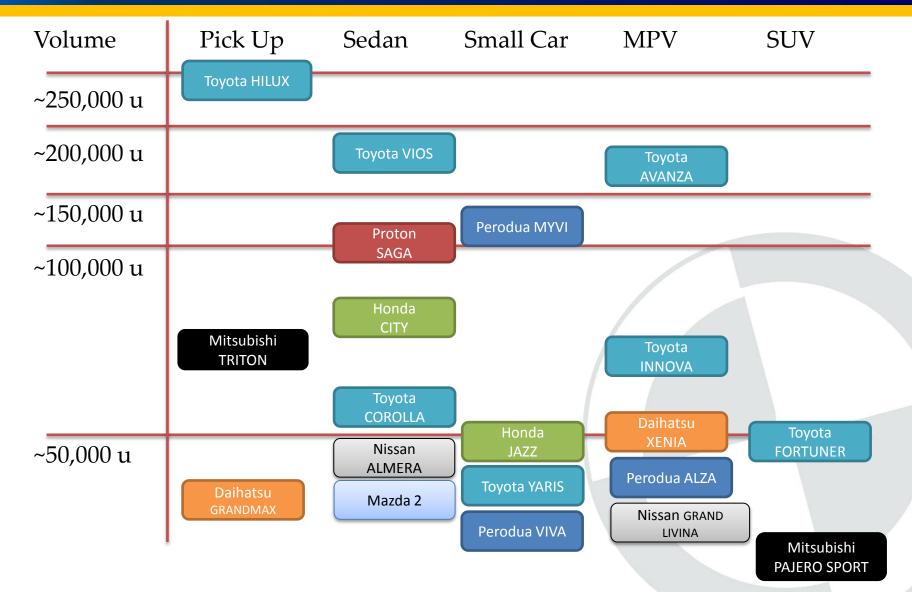
#### We moved the baseline

- <u>Toyota VIOS</u> 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
- <u>Ford Fiesta</u> Implementation of top tether for all ISOFIX application starting 20<sup>th</sup> 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.
- <u>Daihatsu Xenia</u> 1<sup>st</sup> to offer variant option of either airbag or radio.

eneral inquiries: aseancap@gmail.con



#### Sales Data 2012 (ASEAN Top 20)



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### Dual Airbags + ABS





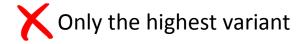
#### **Availability across variants**







Some of the variants







## Dual Airbags + ABS

Car	Airbags	ABS
Toyota Avanza		X
Daihatsu Xenia		
Toyota Innova		X
Suzuki Ertiga	X	X
Nissan Livina		1







# Road Maps

Phase 1	Phase 2	Phase 3
May 2012 – Jan 2013	April 2013 – August 2013	Oct 2013 – 2014
ODB 64: 40% offset	ODB 64: 40% offset	ODB 64: 40% offset
5 star pre-requisite [ESC & SBR Frontal]	5 star pre-requisite [ESC & SBR Frontal]	5 star pre-requisite [ESC & SBR Frontal & Side Impact R95 (to be tested at ASEAN NCAP certified lab)]
		4 star pre-requisite – Side Impact R95 to be tested at ASEAN NCAP certified lab.





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