



Safer Cars for ASEAN Region

INTRODUCTION TO HEATSTROKE IN REAR SEATS

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FIA Foundation
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Bloomberg
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GLOBAL



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➤ New Car Assessment Program for Southeast Asia region (ASEAN NCAP) has been established since 8th December 2011 on MOU Signing between Global NCAP and MIROS in New Delhi, India.



#	Est. year	Countries	#	Est. year	Countries
1	1959	USA	6	1999	South Korea
2	1978	USA	7	2006	China
3	1991	Japan	8	2010	South America
4	1992	Australia & New Zealand	9	2011	Southeast Asian countries
5	1997	FRA, GER, ITA, ESP, SWE, NED, UK (EU)			



Summary of Achievements

➤ How many cars have been tested?

- To date
 - **79** models & variants
 - **100** ratings

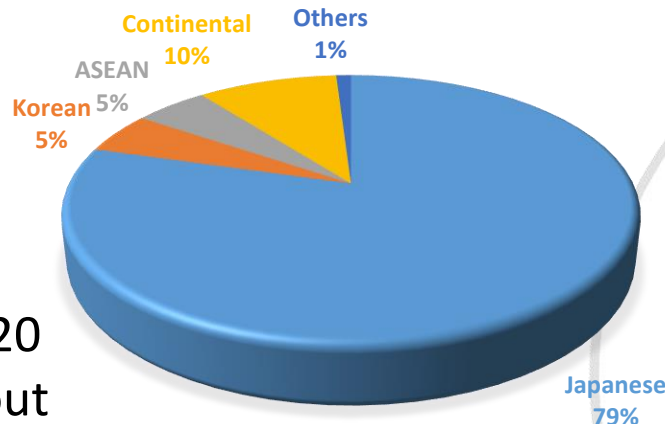
➤ How many brands?

- **23**
- All Japanese brands have been tested.
- **17** brands from Top 20 ASEAN brands (left out BMW, Mercedes & Hino)



PASSIVE
SAFETY

ASEAN MARKET



➤ What is the market coverage?

- By End of 2017
 - **Complete Top 30 models**
 - **46** models from Top 60
 - **90%** market share
 - 9 out of 10 car sold in ASEAN Region rated with ASEAN NCAP.
 - **96%** is 4-star & above

Current Test & Assessments

50%

ADULT OCCUPANT PROTECTION

Starting from 2017 until 2020, instead of a separate rating for AOP and COP, a single rating system is introduced in which AOP contributes 50% of the overall rating with a maximum 36 points from three main assessments; offset frontal, side impact and HPT evaluation.

The test protocol for offset frontal test remains the same except for the inclusion of Q dummies replacing the existing P dummies. On the other hand, the requirement for side impact test has improved considerably from a legislation test (UN R95) to a more comprehensive test.

In addition, realizing the need to further improve the safety of occupants from side impacts, ASEAN NCAP has introduced additional requirement on the fitment of HPT in which the score is based on Fitment Rating System (FRS). HPT can be other than an airbag, as long as it protects the head. However, for technologies other than the conventional curtain or head airbags, manufacturer is requested to provide evidence that the system is effective, at least in principle, before a test can be allowed.

2012 – 2016 (AOP Single Rating)

Offset Frontal Test
• Maximum score of 16

Side Impact Test
• Compliance with UN R95
• 4-Star & above (September 2013–2014)
• 3-Star & above (2015–2016)

2017 – 2020 (50% of the Overall Rating)

Offset Frontal Test
• Maximum score of 16

Side Impact Test
• Maximum score of 16

HPT Evaluation
• The calculation is based on FRS with a maximum of 4 points

MAXIMUM OF 36 POINTS

25%

CHILD OCCUPANT PROTECTION

Protection for children in a vehicle is as important as adult protection. Currently ASEAN NCAP is separately rating adult and child.

Instead of a separate rating in 2012–2016 requirement, the new requirement for COP comprising 25% of the overall safety rating. This step is taken to ensure a vehicle receives the highest star award and also provides the best protection for the child.

Child Occupant Protection			
2012–2016 (COP Single Rating)		2017–2020 (25% of the Overall Rating)	
Dynamic Assessment (24 Points)		Dynamic Assessment (24 Points)	
Frontal Impact	P series dummy	Frontal Impact	Q series dummy
	PLS PS		Q1.5 Q3
	Head 3 6		Head 4 4
	Chest 6 6		Chest 2 2
Side Impact	Neck 3 N/A	Side Impact	Neck 2 2
			Head 4 4
CRS Based Assessment (12 Points)		CRS Installation Assessment (12 Points)	
CRS Marking		References List Assessment	
CRS to Vehicle Interface		OEM Assessment	
8 points per CRS		10 points	
4 points per CRS		2 points	
Vehicle Based Assessment (13 Points)		Vehicle Based Assessment (13 Points)	
Use of CRS on the Front Seats		Provision of Three-point Seatbelts	
Provision of Three-point Seatbelts		Gabarit Installation	
5 points		2 Simultaneous Use Seating Positions	
1 point		ISOFIX Usability	
2 points		Two or more Largest ISOFIX Positions	
3 points		Passenger Airbag Warning Marking and Disabling	
2 points		5 points	

Furthermore, assessment method has been improved in the new protocol for dynamic assessment by introducing Q dummies replacing P dummies. Q dummy provides better biofidelic response compared to P dummy. In addition, side impact test assessment has been added to the dynamic assessment criteria. CRS based assessment section has been replaced by CRS Installation assessment. As for Vehicle Based Assessment, there will be apparent changes which includes additional requirement on passenger airbag warning, marking and disabling. The list of the CRS required for the assessment is as follows.

CRS Installation Assessment			
Vehicle Type	CRS	Model	Score
Group 0+	I	Maxi Cost Cabriolet	8
		Combi Malgot	8
		Combi Buon Junior Air	8
		Britax Baby Safe Plus Isofix Base	11
Group 0+	I	Maxi Cost Malloft	11
		Britax Duo Plus	11
Group I	II	Britax Parkway SGL	11
			8
Group I	II		8
			8
Group I	II		8
			8

25%

SAFETY ASSIST

Promotion of Safety Assist Technologies (SATs) has become of the main pillars in the new road map 2017–2020.

It contributes 25% of the overall rating with a maximum of 18 points focusing on Effective Braking and Avoidance (EBA), SBR, BST and Advanced SATs. This differs significantly from previous requirement in which only ESC and frontal SBR systems are considered as prerequisite for 5-Star AOP rating. Furthermore, the score calculation for all four elements is based on Fitment Rating System (FRS) except for advanced SATs.

Instead of only ESC, ABS is also considered in the new road map under EBA. Based on ASEAN NCAP's observation, ABS fitment rate in certain ASEAN countries is still lacking and it is still being offered as optional rather than standard equipment. As an encouragement for vehicle manufacturers, incentive is given to those vehicles fitted with rear SBRs in addition to frontal SBR. This is also part of ASEAN NCAP's mission to increase wearing rates among rear passengers beyond legislative approach.

Apart from that, in vision to reduce the number of lane-changing/merging crashes especially involving motorcycles, ASEAN NCAP introduces additional incentive for vehicle equipped with BST. This is part of ASEAN NCAP's strategic approaches in curbing the number of accidents and injuries involving motorcycles in the region. Furthermore, as a way forward for autonomous vehicle initiative around the world and harmonization with other NCAPs, advanced SATs such as AEB and several others are also included.

2012 – 2016 (Prerequisite for 5-Star AOP)

Electronic Stability Control

Seatbelt Reminder

• Driver
• Front Passenger

2017 – 2020 (25% of the Overall Rating)

Effective Braking & Avoidance

• Anti-lock Braking System

• Electronic Stability Control

Seatbelt Reminders

• Driver

• Front Passenger

• Rear Passengers

Blind Spot Technology

• Nearside

• Offside

Advanced Safety Assist Technologies*

• Integrated CRS

• AEB Inter-urban

• AEB City

• AEB VRU

• Lane Departure Warning System

• Forward Collision Warning System

The calculation is based on FRS with a maximum of 8 points

The calculation is based on FRS with a maximum of 6 points

The calculation is based on FRS with a maximum of 2 points

A score of 1 point is awarded for each SAT available in any variant (minimum 1 country for each sector) with a maximum of 2 points

MAXIMUM OF 18 POINTS

*Manufacturers are encouraged to propose any Advanced SATs subject to ASEAN NCAP approval.



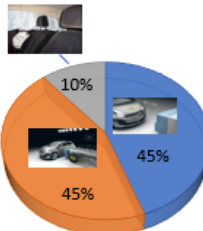

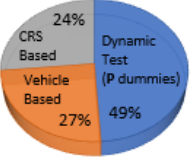
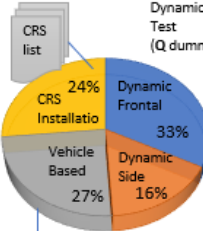

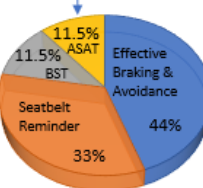


Mix of Results (from various crash testing facilities)



JARI, JAPAN



New Honda CR-V

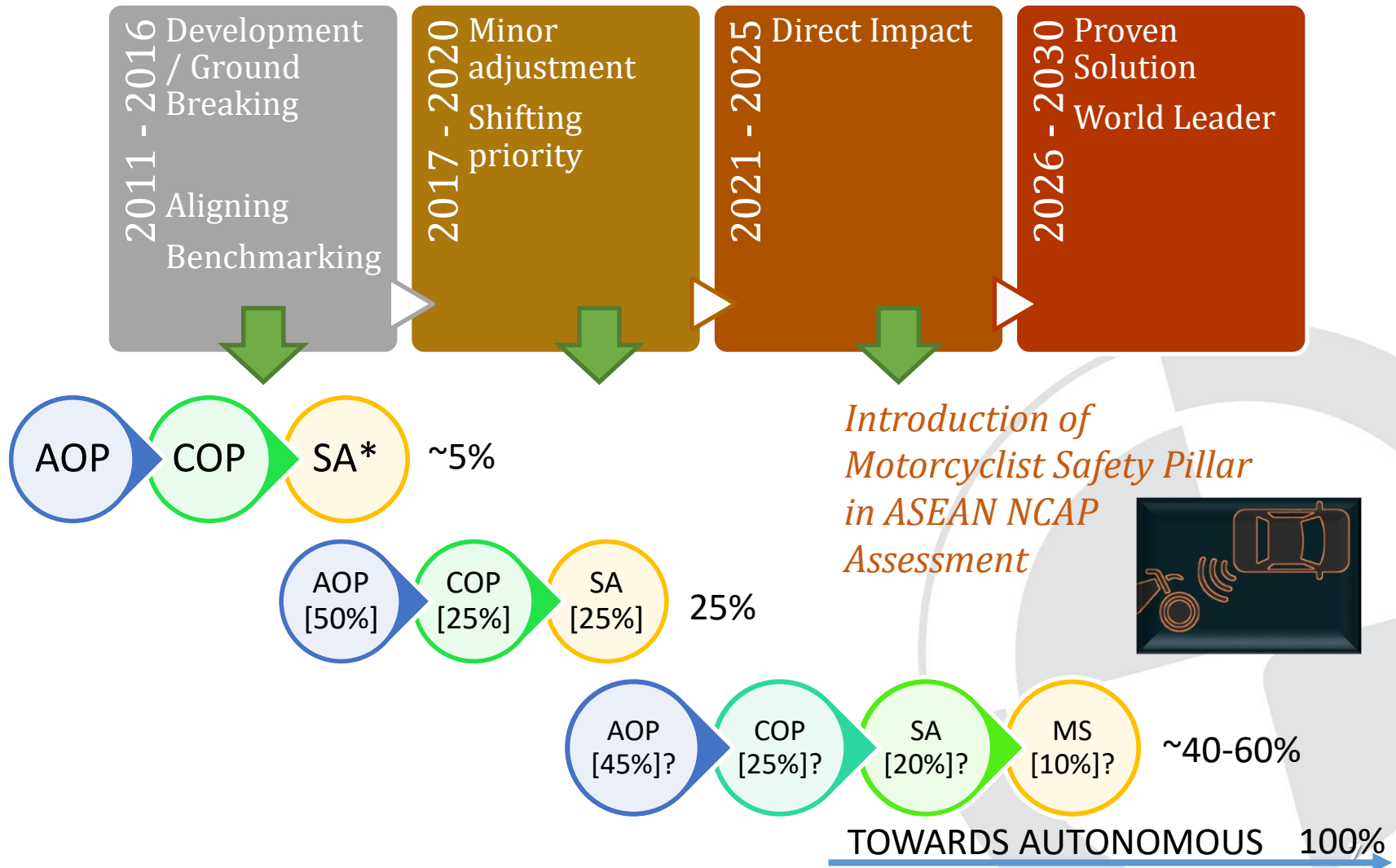
Ratings	2011 - 2016		2017 - 2020	
	Assessment	Weightage	Assessment	Weightage
Adult Occupant Protection (AOP) 	 100% <u>Pre-requisite</u> Pass UNR95 Lateral Collision Test >> 3-star	100% separate rating	 10% 45% 45%	50%
Child Occupant Protection (COP) 	 24% 27% 49%	100% separate rating	 24% 27% 16% 33% Dynamic Test (Q dummies)	25%
Safety Assist 	ESC & SBR for Driver & Front Passenger >> 5-star	Pre-requisite	 11.5% 11.5% 11.5% 33% 44% Integrated CRS	25%
Rating Plate	 *Dual Rating is possible			



+ *Grand Prix Awards Every 2 years*
**Safety Performance*
**Most Affordable 5-Star car in each country.*

*Credit EuroNCAP for Illustration

Roadmap 2021 - 2030



Summary Usage Percentage

Year/ Season	CNY		Aidilfitri	
	Before Ops %	During Ops %	Before Ops %	During Ops %
2013	11.80	9.00	3.30	1.90
2014	N/A	N/A	N/A	N/A
2015	N/A	N/A	3.30	7.20
2016	16.90	12.50	7.20	4.40
2017	30.06	23.12	24.96	26.30



Child Vehicular Heat Stroke Fact Sheet

- The most dangerous mistake a parent or caregiver can make is to think leaving a child alone in a vehicle could never happen to them or their family.
- More than 50% cases, they unknowingly left them in the vehicle.



- Rear facing car seats look the same whether there is baby in it or not
- Babies often fall asleep, becoming quiet.



VIDEO

LIVE

SHOWS



Hospital CEO Leaves Child to Die in Hot Car

By ABC NEWS July 5

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Authorities in Iowa are trying to decide whether to file charges against a hospital CEO whose 7-month-old daughter died after being accidentally left in a minivan while she rushed off to attend meetings.

The county medical examiner has ruled the death accidental, but prosecutors have yet to decide whether to charge Kari Engholm over the death of her daughter Clare.

Engholm left Clare in a minivan last month on a day when outside temperatures approached 90 degrees. Engholm was rushing to attend a series of meetings at Dallas County Hospital in Perry, Iowa.

Engholm's family, it seems, has forgiven her, calling the death a tragic mistake, the result of an overstressed woman who was used to her husband dropping the little girl off with the baby sitter.

"Kari is a loving mother and my best friend," her husband, Dennis, said at a memorial service for Clare last month. "She loved Clare deeply. She always remembers and celebrates our children's milestones."

- The inside of a vehicle heats up immediately
 - 125 degree in minutes
- 80% of the increase in temperature happens in the first 10 minutes.
- Children have died from heatstroke in cars in temperature as low as 60 degrees.

- ASEAN NCAP proposing new method to solve this problem by awarding points in future roadmap 2021 – 2030 for this new technology.
- Because
 - Our Child, Our Priority

