

PRESS RELEASE

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ASEAN NCAP – SAFER CARS FOR ASEAN REGION

ASEAN NCAP Announced Results of Its First Premium Car, Commercial Panel Vans, Honda Accord and Suzuki Ertiga

Bali, Indonesia, 21 November 2019 – The New Car Assessment Programme for Southeast Asian Countries (ASEAN NCAP) released its second round of results for the fourth quarter of 2019. Some of the results were the outcome from the series of crash tests that ASEAN NCAP performed during the Vehicle Safety Week 2019 (VSW2019) last October at MIROS PC3 in Melaka. The results were released in conjunction with the 11th ASEAN Automobile Safety Forum (AASF) that ASEAN NCAP organized in Bali, Indonesia. The results were from the assessment performed on Honda Accord, BMW 318i, Chana Era Star II, DFSK V25L and Suzuki Ertiga. ASEAN NCAP was honoured to have Mr. Sigit Irfansyah, Director of Directorate of Land Transportation Means, Ministry of Transportation, Indonesia who presented the rating plates to the recipients.

The new **Honda Accord** made an impressive performance in the assessment by achieving **5-Star** rating with an overall score of **91.79 points**. The sedan obtained **49.07 points for the Adult Occupant Protection (AOP) category**, **23.28 points for the Child Occupant Protection (COP)** and **19.44 points for Safety Assist Technologies (SATs)**. The Accord is equipped with six airbags, Electronic Stability Control (ESC), Seatbelt Reminder System (SBR) for its frontal occupants and blind spot technology for its passenger side (offside) as a standard equipment across all its variants. The model makes the SATs available in the car either as standard or as an optional equipment in the country markets in which it is sold except for Laos and Vietnam. In addition to the SATs that are being assessed by ASEAN NCAP, it also offers another safety technology to the consumers, i.e. Driver Attention Monitor.

In conjunction with the VSW2019, ASEAN NCAP performed a crash test on a premium car for the first time since its establishment, a BMW 318i. The **BMW 318i** obtained a **4-Star** rating under the ASEAN NCAP assessment with a total score of **81.88 points**. The scoring breakdown of the 3 series premium car is based on the **AOP with 48.92 points** from the full score of 50 points, the **COP assessment with 18.38 points** from 25 points and **14.58 points for SATs category** over 25 points. The assessed 318i was assembled and sold only in Malaysia and comes with a standard fitment of six airbags, ESC and SBR for driver only. The sedan does not offer any SATs fitment listed under ASEAN NCAP assessment except for the eCall system that functions as a post-crash response technology. ASEAN NCAP was pleased that the frontal offset test of the BMW 318i was witnessed by the Honourable Dato' Seri Dr.

Wan Azizah Dr. Wan Ismail, Deputy Prime Minister whilst the side impact test was witnessed by the Honourable Datuk Kamarudin Jaffar, Deputy Minister of Transport.

The second vehicle that ASEAN NCAP tested during the VSW2019 was the **Chana Era Star II**, one of the first two semi panel commercial vans ASEAN NCAP assessed during that week. The Era Star II did not perform very well in the test with an overall score of **10.91 points** in which it is rated **Zero-Star**. The semi panel van obtained **0.00 point for both the AOP and SATs categories** and only had **10.91 points for the COP category** as the sole contributor for its overall scoring. The Era Star II provided poor protection to the dummies in both frontal offset and side impact tests. Furthermore, the crash tests for Q1.5 child dummy was not able to perform due to the insufficient length of the seatbelt for child seat's rearward position.

ASEAN NCAP tested its second commercial semi panel van during VSW2019 on the model **DFSK V25L**. The model was also awarded with **Zero-Star rating** with a total score of **31.70 points**. In the assessment, its **AOP category obtained 18.12 points, 13.58 points for the COP and 0.00 point for the SATs**. Similar to the Era Star II model, the V25L did not fare well particularly in the frontal offset test in which the frontal occupant cabin severely collapsed against the driver. Both of the tested Chana Era Star II and DFSK V25L were models that are sold in Malaysia. The panel vans do not offer any Anti-lock Braking System (ABS) and ESC and seatbelt is the main restraint system for the use on child safety seats.

The fourth result is the latest model of **Suzuki Ertiga**. This is the second time ASEAN NCAP tested the Ertiga in which the first was in 2016 under the first protocol with 4-Star (12.39 points over 16) for AOP and 2-Star rating for COP at 33% compliance. The new Ertiga (under the current protocol) was awarded with **4-Star rating** with an accumulated score of **65.41 points**. The MPV fared well in the assessment with **35.66 points for the AOP, 18.85 points for the COP and 10.90 points for SATs**. It is equipped with standard dual airbag and SBR for both frontal occupants across all variants. The Ertiga offers ABS as a standard fitment in all the available countries whilst ESC is available as standard in the Thailand market and as an optional fitment in Brunei, Indonesia, Philippines and Vietnam.

MIROS Director-General and ASEAN NCAP Chairperson, Dr. Siti Zaharah Ishak said:

"In the recently organized Vehicle Safety Week organized by MIROS, ASEAN NCAP had made significant progress in our crash test. During the week we not only tested commercial vehicles but for the first time we tested a premium brand vehicle, a BMW 318i. Unfortunately, the results of the test were not as we expected. Nevertheless, we are proud that Honda maintained its safety performance in the Accord, rated with 5-Star. Further to the tests that we conducted on commercial vehicles, we hope there will be significant impact towards the vehicle safety regulation of commercial vehicles, not only in Malaysia but also in other South East Asia countries."

ASEAN NCAP Secretary-General, Professor (Adjunct) Ir. Dr. Khairil Anwar Abu Kassim said:

“It has always been my dream to crash test a premium car ever since ASEAN NCAP was formed. With over 100 ratings that we produced, we have encouraged the production of safer cars with affordable prices in the South East Asia countries. Most importantly, by conducting the test on BMW 318i, we would like to ensure that premium cars that are sold in this region have the best safety specifications or at least at par with other affordable safety cars in the market that have been rated with 5-Star ASEAN NCAP rating. But it is unfortunate that the BMW 318i that we purchased and tested do not have a seatbelt reminder system (SBR) for its front passenger, which is one of the significant items that caused it to receive 4-Star rating. Despite the tested sedan not being the latest generation of 318i model offered in the Malaysian market, the car is still available for consumers to purchase. This definitely raises concern with regards to safety. Nevertheless, we took it upon ourselves to check on the specification of the latest 318i model and found that it is still not equipped with SBR for the front passenger.”

An overview of the second ASEAN NCAP Q4 2019 results are as follows.

- ❖ The new **Honda Accord** was awarded with **5-Star** ASEAN NCAP rating with an overall score of **91.79 points**. For each assessed category, the Accord obtained 49.07 points for AOP, 23.28 points for COP and 19.44 points for SATs.
- ❖ The **BMW 318i** received **4-Star** ASEAN NCAP rating with a total score of **81.88 points**. The score was based on 48.92 points for AOP, 18.38 points for COP and 14.58 points for the SATs category.
- ❖ The semi panel van **Chana Era Star II** had managed to obtain **Zero-Star** ASEAN NCAP rating with an overall score of **10.91 points**. The van's scores for each AOP and SATs category were 0.00 point while 10.91 points for the COP.
- ❖ The second assessed semi panel van, **DFSK V25L** achieved **Zero-Star** rating with a total score **31.70 points**. The breakdown of the score was 18.12 points (AOP), 13.58 points (COP) and 0.00 point (SATs).
- ❖ The new **Suzuki Ertiga** successfully obtained an accumulated score of **65.41 points** in which it is awarded with **4-Star** ASEAN NCAP rating. It achieved 35.66 points for AOP, 18.85 points for COP category and 10.90 points for SATs.





ASEAN NCAP

ASEAN NCAP is a new addition to the NCAP organizations around the world, which is targeted to enhance safety standards, raise consumer awareness and thus encourage a market for safer vehicles in the Southeast Asia region (ASEAN community). This is a collaborative effort by MIROS and Global NCAP, in which the latter funded the pilot phase of the project. ASEAN NCAP is also supported by the membership of Automobile Associations from Malaysia (AAM), the Philippines (AAP), Singapore (AA Singapore), Cambodia (AAC) and Thailand (RAAT).

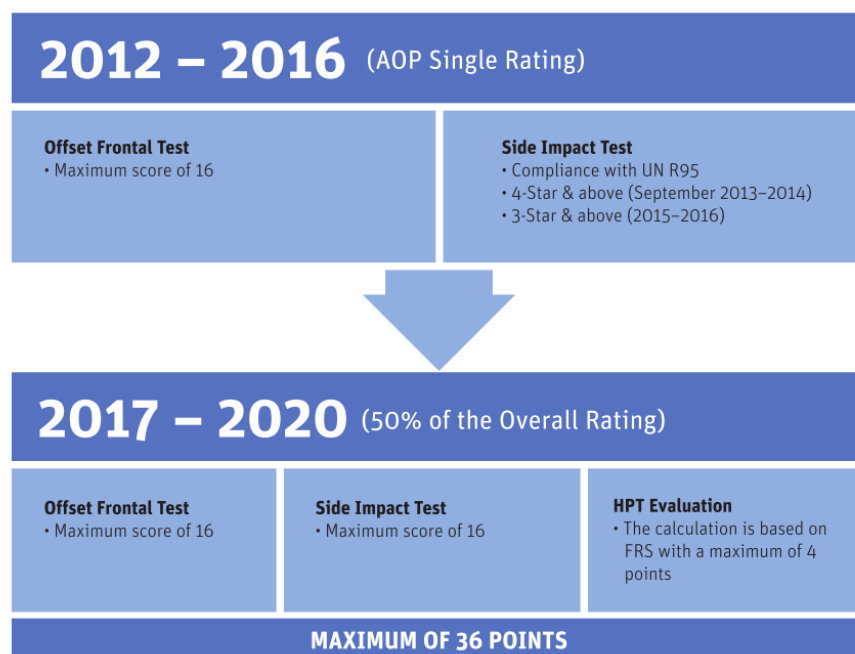
Currently, ASEAN NCAP Steering Committee (SC) is chaired by ASEAN NCAP Chairperson, Dr. Siti Zaharah Ishak and the Technical Committee (TC) is chaired by ASEAN NCAP Secretary-General, Professor (Adjunct) Ir. Dr. Khairil Anwar Abu Kassim.

❖ **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 to 50% of the overall rating with a maximum 36 points from three assessments; offset frontal, side impact and head protection technology (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).



❖ **Child Occupant Protection**

Protection for children in a vehicle is as important as adult protection. The new COP requirement for 2017–2020 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	Head Chest Neck	P series dummy		Frontal Impact	Head Chest Neck	Q series dummy	
		P1.5	P3			Q1.5	Q3
		3	6			4	4
		6	6			2	2
	3	N/A	2		2		
Side Impact	Head			Side Impact	Head	4	
						4	
CRS Based Assessment		(12 Points)		CRS Installation Assessment		(12 Points)	
CRS Marking		8 points per CRS		References List Assessment		10 points	
CRS to Vehicle Interface		4 points per CRS		OEM Assessment		2 points	
Vehicle Based Assessment		(13 Points)		Vehicle Based Assessment		(13 Points)	
Use of CRS on the Front Seats		5 points		Provision of Three-point Seatbelts		1 point	
Provision of Three-Points Seatbelts		1 point		Gabarit Installation		2 points	
Gabarit Assessment		2 points		2 Simultaneous Use Seating Positions		2 points	
ISOFIX		3 points		ISOFIX Usability		2 points	
Integrated CRS		2 points		Two or more Largest ISOFIX Positions		1 points	
				Passenger Airbag Warning Marking and Disabling		5 points	

The assessment method has also 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.

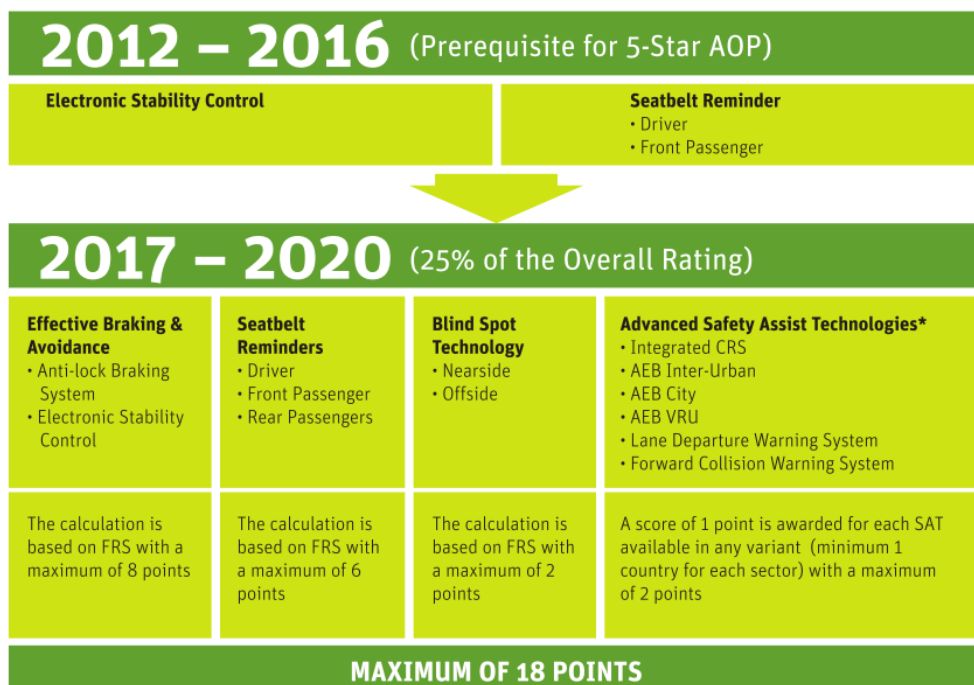
CRS Installation Assessment				
	Category	CRS	Direction	Interface
Reference List	Group 0+	Maxi Cosi Cabriofix	Rwd	B _ _ _
	Group 0+/I/II	Combi Malgot	Rwd	B _ _ _
	Group 0+/I/II	Combi Malgot	Fwd	B _ _ _
	Group II/III	Combi Buon Junior Air	Fwd	B _ _ _
	Group 0+	Britax Baby Safe Plus ISOfix Base	Rwd	_ I L _
	Group 0+/I	Maxi Cosi Milofix	Rwd	_ I _ S
	Group 0+/I	Maxi Cosi Milofix	Fwd	_ I _ S
	Group I	Britax Duo Plus	Fwd	_ I _ S
	Group II/III	Britax KidFix XP	Fwd	B I _ _
OEM	Q1.5	(Manufacturer Selection) Baby Safe Plus ISOFIX Base		
	Q3	(Manufacturer Selection) ISOFIX		

❖ ***Safety Assist Technology***

Promotion of Safety Assist Technologies (SATs) has become one of the main pillars in the new rating system for 2017–2020. It contributes 25% of the overall rating with a maximum of 18 points focusing on Effective Braking and Avoidance (EBA), Seatbelt Reminder (SBR), Blind Spot Technology (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 FRS except for advanced SATs.

In addition to ESC, ABS is also considered in the new rating system 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 legislation approach.

With the 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.



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

❖ Fitment Rating System

It is recognized that ASEAN NCAP has changed the landscape of automotive safety in the region. Apart from the increasing number of vehicles with higher ASEAN NCAP ratings, the demand for those vehicles among the consumers is gaining as well. Nevertheless, the positive impact is still imbalance as the safety features of specific models sold are not necessarily similar among the countries in the region and sometimes can be adversely different. Thus, ASEAN NCAP has formulated a Fitment Rating System (FRS) in order to minimize the substandard treatment.

The system applies for technologies i.e., HPT, EBA, SBR and BST. For FRS, ASEAN NCAP has developed a formula for car technology fitment score (CTFS) summarized as follows.

$$CTFS = \frac{\sum_{i=1}^{i=n} \alpha_i CS_i}{\sum_{i=1}^{i=n} CS_i} \times TFS$$

CTFS – Car Technology Fitment Score
CS – Country Score
TFS – Technology Fitment Score
 α – Fitment Rating Score

Each CS is determined based on the criteria and α is listed in the respective FRS tables. It is to be noted that the value of TFS has been set forth for HPT (4 points), EBA (8 points), SBR (6 points), and BST (2 points). As for the CS, the value is based on the sectors the countries represent. The philosophy behind the country score is the 3-5-2 concept that was introduced by ASEAN NCAP in 2013. Generally,

the 10 countries in the region are divided into three tiers (3 [Laos, Cambodia, Myanmar] - 5 [Malaysia, Thailand, Indonesia, the Philippines, Vietnam, 2 [Brunei, Singapore]) based on their similarities in terms of road safety situation and automotive industry. The concept is further refined and categorized into four sectors; Sector 0, Sector 1, Sector 2, and Sector 3. Each country in the same sector represents similar CS. For example, in Sector 0, both Brunei and Singapore carry similar CS of 2 points each.

Sector 0	Sector 1	Sector 2	Sector 3
<ul style="list-style-type: none"> • Brunei • Singapore 	<ul style="list-style-type: none"> • Malaysia • Thailand • Indonesia 	<ul style="list-style-type: none"> • The Philippines • Vietnam 	<ul style="list-style-type: none"> • Laos • Cambodia • Myanmar
CS 2 points per country	CS 3 points per country	CS 2 points per country	CS 1 point per country


Fitment Type	Details	Fitment Rating Score, \propto
Fitment Rating System for Head Protection Technology		
Option A	Vehicle model is equipped with HPT as standard equipment	1
Option B	Vehicle model is equipped with HPT as optional equipment	0.5
Option C	Vehicle model is not equipped with HPT	0
Fitment Rating System for Effective Braking and Avoidance		
Option A	Vehicle model is equipped with ESC as standard equipment	1
Option B	Vehicle model is equipped with ESC as optional equipment but ABS as standard equipment	0.5
Option C	Vehicle model is not equipped with ESC but equipped with ABS as standard equipment	0.375
Option D	Vehicle model is equipped with ESC and ABS as optional equipment	0.25
Option E	Vehicle model is not equipped with ESC but equipped with ABS as optional equipment	0.125
Option F	Vehicle model is not equipped with either ESC or ABS	0
Fitment Rating System for Seatbelt Reminders		
Option A	Vehicle model is equipped with SBR for driver, front passenger and rear passengers as standard equipment	1
Option B	Vehicle model is equipped with SBR for driver and front passenger as standard equipment but rear passengers as optional equipment	0.75
Option C	Vehicle model is equipped with SBR for driver and front passenger only as standard equipment	0.5
Option D	Vehicle model is equipped with SBR for driver only as standard equipment	0.25
Option E	Vehicle model is not equipped with SBR	0
Fitment Rating System for Blind Spot Technology		
Option A	Vehicle model is equipped with BST for both nearside and offside as standard equipment	1
Option B	Vehicle model is equipped with BST for both nearside and offside as optional equipment	0.5
Option C	Vehicle model is equipped with BST for one side only as standard equipment	0.5
Option D	Vehicle model is equipped with BST for one side only as optional equipment	0.25
Option E	Vehicle model is not equipped with BST	0

From Dual Rating to Single Star Rating

From 2012, the dual rating system has been able to increase the availability of safer cars in the market. ASEAN NCAP recorded almost 90% cars with 4-Star and above in its evaluation until August 2015. The result shows that the current system has benefited the market.

However, the weakness of the system was detected particularly in the promotion of safety. Most of the cars were promoted as country based not on regional based. Hence, manufacturers intend to promote higher ratings compared to the lower ones.

The new rating system emphasizes on current and future. The AOP (current) will be given the most allocation to strengthen the crashworthiness of the cars. The future COP and Safety Assist is resilient to produce and promote better ASEAN car specifications in the future. The basis of the division is equally important to current and future. As collision avoidance is essential, protecting the child in cars is an obligation. Both are equally important to future of safer cars and require similar attention.



	AOP		COP		Safety Assist*		
ODB	16		Dynamic Assessment Frontal	16	Effective Braking & Avoidance	8	2017-2020 ASEAN NCAP RATING
SIDE	16		Dynamic Assessment Side	8	Seatbelt Reminders	6	
HPT Evaluation*	4		Installation of CRS	12	Blind Spot Technology	2	
			Vehicle Based Assessment	13	Advanced SATs	2	
<i>Max. Score (1)</i>		36		49		18	
<i>Normalized Score (2)</i>		actual score / (1)		actual score / (1)		actual score / (1)	
<i>Weighing (3)</i>		50%		25%		25%	Overall Score
<i>Weighted Score</i>		(2) x (3)		(2) x (3)		(2) x (3)	Total
Rating		minimum: normalised (2) / actual score by box for the respective star rating					Min. Overall Score
5-Star	75%	27.0	75%	36.75	60%	10.80	75%
4-Star	65%	23.4	60%	29.40	40%	9.00	65%
3-Star	45%	16.2	30%	14.70	30%	7.20	50%
2-Star	30%	10.8	25%	12.25	20%	3.60	40%
1-Star	20%	7.20	15%	7.35	10%	1.80	30%

ASEAN NCAP Rating Plate – Results Simplified for Public Consumption

The result of the test is primarily for public consumption i.e. for consumers to consider the quality of safety protection offered by the car model based on NCAP assessment. As ASEAN NCAP has moved to a single rating scheme, consumers can simply refer to the star rating which comprises the accumulated score of the three main assessments on the safety aspects of the car model; AOP, COP and SAT.



About MIROS – The Malaysian Institute of Road Safety Research (MIROS) was established in 2007 as an agency under the Ministry of Transport Malaysia to serve as a central repository of knowledge and information on road safety. The findings derived from research and evidence-based intervention programmes provide the basis for the formulation of new strategies, legislations, policies, and enforcement measures, governing road safety at the national level. Principally engaged in research, MIROS collaborates closely with local and international government agencies and private bodies to further the cause of road safety.

In 2014, the ASEAN Transport Ministers had appointed MIROS as the ASEAN Road Safety Centre. The aims of this centre are to promote and provide knowledge on road safety issues among ASEAN Member States which includes road traffic laws and regulations, data management, standards development, and road safety awareness and education.

About Global NCAP – Global NCAP is a non-profit organization registered in the United Kingdom which aims to encourage the worldwide availability of independent consumer information about the safety of motor vehicles.

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