

FITMENT RATING SYSTEM

VERSION 2.0
MAY 2024



**ASEAN NCAP
PROTOCOL**

2026-2030

ACTO

Preface

Where text is contained within square brackets, this denotes that the procedure being discussed is currently being trialled in ASEAN NCAP. Its incorporation in the Test Protocol will be reviewed at a later date.

During the test preparation, vehicle manufacturers are encouraged to liaise with the laboratory and to check that they are satisfied with the way cars are set up for testing. Where a manufacturer feels that a particular item should be altered, they should ask the laboratory staff to make any necessary changes. Manufacturers are forbidden from making changes to any parameter that will influence the test, such as dummy positioning, vehicle setting, laboratory environment etc.

It is the responsibility of the test laboratory to ensure that any requested changes satisfy the requirements of ASEAN NCAP. Where a disagreement exists between the laboratory and manufacturer, the ASEAN NCAP secretariat should be informed immediately to pass final judgement. Where the laboratory staff suspect that a manufacturer has interfered with any of the setup, the manufacturer's representatives should be warned that they are not allowed to do so themselves. They should also be informed that if another incident occurs, they will be asked to leave the test site.

Where there is a recurrence of the problem, the manufacturer's representatives will be told to leave the test site and the Secretariat

should be immediately informed. Any such incident may be reported by the Secretariat to the manufacturer and the persons concerned may not be allowed to attend further ASEAN NCAP tests.

DISCLAIMER: ASEAN NCAP has taken all reasonable care to ensure that the information published in this protocol is accurate and reflects the technical decisions taken by the organisation. In the unlikely event that this protocol contains a typographical error or any other inaccuracy, ASEAN NCAP reserves the right to make corrections and determine the assessment and subsequent result of the affected requirement(s).

In addition to the settings specified in this protocol, the following information will be required from the manufacturer of the car being tested in order to facilitate the vehicle preparation. A vehicle handbook should be provided to the test laboratory prior to the assessment.

ASSESSMENT PROTOCOL – FITMENT RATING SYSTEM

Table of Contents

1 INTRODUCTION	3
2 METHODS OF ASSESSMENT	4
3 FITMENT RATING SCORE FOR HEAD PROTECTION TECHNOLOGY	8
4 FITMENT RATING SCORE FOR CHILD PRESENCE DETECTION	9
5 FITMENT RATING SCORE FOR EFFECTIVE BRAKING AND AVOIDANCE	11
6 FITMENT RATING SCORE FOR SEATBELT REMINDER SYSTEM.....	13
7 FITMENT RATING SCORE FOR AUTONOMOUS EMERGENCY BRAKING	15
8 FITMENT RATING SCORE FOR LANE SUPPORT ..	17
9 FITMENT RATING SCORE FOR ADVANCED SAFETY ASSIST TECHNOLOGIES.....	18
10 FITMENT RATING SCORE FOR BLIND SPOT TECHNOLOGY	19
11 FITMENT RATING SCORE FOR ADVANCED REAR VISUALIZATION.....	20

12 FITMENT RATING SCORE FOR AUTO HIGH BEAM
.....21

13 FITMENT RATING SCORE FOR PEDESTRIAN
PROTECTION.....23

14 FITMENT RATING SCORE FOR AEB MOTORCYCLE
.....25

15 FITMENT RATING SCORE FOR ADVANCED
MOTORCYCLIST SAFETY TECHNOLOGIES26

NEW CAR ASSESSMENT PROGRAM FOR SOUTHEAST ASIAN COUNTRIES (ASEAN NCAP)

ASSESSMENT PROTOCOL — FITMENT RATING SYSTEM

1 INTRODUCTION

ASEAN NCAP has significantly elevated automotive safety standards in the Southeast Asia region. Aside from the increasing number of vehicles with higher ASEAN NCAP ratings, the demand for such vehicles among the consumers can now be clearly seen. Nevertheless, there is still imbalance in the positive impact as the safety features of specific models are not necessarily similar across the region and this can sometimes have adverse effects.

In order to reduce the substandard treatment, ASEAN NCAP has developed the world's first Fitment Rating System (FRS). This document shall deal with the assessment of FRS for Head Protection Technology (HPT), Child Presence Detection (CPD), Effective Braking and Avoidance (EBA), Seatbelt Reminder (SBR), Autonomous Emergency Braking (AEB), Blind Spot Technology (BST), Advanced Safety Assist Technology (SAT), Advanced Rear Visualization (ARV) and Auto High Beam (AHB).

2 METHODS OF ASSESSMENT

2.1 Information Required from Manufacturers

2.1.1 Before the above-mentioned technologies can be evaluated by ASEAN NCAP, it is necessary for the manufacturers to provide ASEAN NCAP with detailed information prior to an assessment. Please refer to ASEAN NCAP Guideline for Test Model Form Version 3.0.

2.1.2 ASEAN NCAP will carry out the verification process through its counterparts in the respective countries to ensure the information provided to ASEAN NCAP is valid.

2.2 Performance and Functionality Assessments

2.2.1 In order to determine whether or not the technologies are eligible to be included in the rating calculation, the performance and functionality assessments have to be conducted.

2.2.2 Refer to ASEAN NCAP Assessment Protocol – Adult Occupant Protection Version 3.0 for the assessment of HPT and ASEAN NCAP Assessment Protocol – Safety Assist Version 3.0 for the assessments of SBR system, EBA specifically Electronic Stability Control (ESC) and Anti-lock Braking System (ABS), BST and Advanced SATs.

2.2.3 Vehicles of whose systems meet the requirements will be eligible for further FRS calculation and determination of final

points for respective technologies. Otherwise, more information will be requested from manufacturers and ASEAN NCAP will decide whether to retest or otherwise.

2.3 Determination of Car Technology Fitment Score (CTFS)

2.3.1 Generally, the score for each technology, which is called *CTFS* (Car Technology Fitment Score), is calculated primarily based on the tested model equipped with the technology sold in the respective country and type of fitment. The formula for *CTFS* is as follows;

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

where *CTFS* is the Car Technology Fitment Score, α is the Fitment Rating Score, *CS* is the Country Score and *TFS* is the Technology Fitment Score.

2.3.2 The value for *CS* is based on the sectors the countries represent. The philosophy behind the *CS* 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 and Myanmar] – 5 [Malaysia, Thailand, Indonesia, the Philippines and Vietnam]) – 2 [Brunei and Singapore]) based on their similarities in terms of road safety situation and automotive industry.

2.3.3 The concept is further refined and categorized into four sectors; Sector 0, Sector 1, Sector 2 and Sector 3. Basically, each country in the same sector represents similar CS. Table 1 lists the four sectors with their associated countries and respective CSs. For example, in Sector 0, both Brunei and Singapore carry a similar CS of 2 points each.

Table 1: The CS for each sector

SECTOR 0	SECTOR 1	SECTOR 2	SECTOR 3
Brunei	Malaysia	The Philippines	Laos
Singapore	Thailand	Vietnam	Cambodia
	Indonesia		Myanmar
<i>CS of 2 points per country</i>	<i>CS of 3 points per country</i>	<i>CS of 2 points per country</i>	<i>CS of 1 point per country</i>

2.3.4 As for α and *TFS*, the values differ among the technologies, which will be further explained in the following sections.

2.4 Overall Process Flow

The overall process flow and respective references are illustrated in Figure 1 below.

FlowChart	Reference
<pre> graph TD Start([Start]) --> Step1[Information Required from Manufacturers [Section 2.1]] Step1 --> Step2[Performance and Functionality Assessments [Section 2.2]] Step2 --> Decision{Pass?} Decision -- No --> Start Decision -- Yes --> Step3[Determination of CTFS [Section 2.3]] Step3 --> End([End]) </pre>	<p><i>ASEAN NCAP Guideline for Test Model Form Version 3.0</i></p> <p><i>ASEAN NCAP Assessment Protocol – Adult Occupant Protection Version 3.0</i></p> <p><i>ASEAN NCAP Assessment Protocol – Child Occupant Protection Version 3.0</i></p> <p><i>ASEAN NCAP Assessment Protocol – Safety Assist Version 3.0</i></p> <p><i>ASEAN NCAP Assessment Protocol – Motorcyclist Safety Version 2.0</i></p>

Figure 1: Overall Flow Chart of FRS

3 FITMENT RATING SCORE FOR HEAD PROTECTION TECHNOLOGY

3.1 Realizing the importance of protecting occupant safety from the side impact collisions, ASEAN NCAP retained Head Protection Technology (HPT) as part of the Adult Occupant Protection (AOP) score. The *TFS* for HPT is 8 points.

3.2 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, the manufacturer is requested to provide evidence that the system is effective, at least in principle, before an assessment can be carried out.

3.3 There are three fitment types applied for HPT. Table 2 lists the α values for each fitment type.

Table 2: Fitment Rating Score for HPT

Fitment Type	Details	Fitment Rating Score, α
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

4 FITMENT RATING SCORE FOR CHILD PRESENCE DETECTION

4.1 Realizing that Child Presence Detection (CPD) technology could be an efficient technique to protect a child when he/she is forgotten in a car unknowingly by parents. The assessment method has been improved by introducing a dummy for the detection of forgotten children.

4.2 CPD is a system that will sense the presence of children when they are left unattended in a car and thus generate an alarm that will give a warning to the parent or people in the surroundings.

4.3 ASEAN NCAP realized the importance of the Child Presence Detection (CPD) as part of Child Occupant Protection (COP) in the vehicle. The *TFS* for CPD has been improved from 2 points to 5 points.

4.4 There are three fitment types applied for CPD. Table 3 lists the α values for each fitment type.

Table 3: Fitment Rating Score for CPD

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with Classification 1 and Classification 2 as standard equipment.	1
Option B	Vehicle model is equipped with Classification 1 and Classification 2 as optional equipment and Alert as optional equipment.	0.9
Option C	Vehicle model is equipped with Classification 2 as standard equipment.	0.8
Option D	Vehicle model is equipped with Classification 2 as optional equipment and Alert as optional equipment.	0.6
Option E	Vehicle model is equipped with Alert as standard equipment.	0.5
Option F	Vehicle model is equipped with Alert as optional equipment.	0.25
Option G	Vehicle model is not equipped with CPD	0

5 FITMENT RATING SCORE FOR EFFECTIVE BRAKING AND AVOIDANCE

5.1 From 2012 to 2016, ASEAN NCAP only considered Electronic Stability Control (ESC) as a prerequisite for 5-star AOP rating. Since 2017, instead of only ESC, the new requirement has included an Anti-lock Braking System (ABS) in the assessment. For the 2026 to 2030 protocol, both technologies contribute significant points in the Safety Assist pillar.

5.2 Both ABS and ESC represent the Effective Braking and Avoidance (EBA) which is part of the overall Safety Assist score. The *TFS* for EBA is 6 points.

5.3 There are six fitment types applied for EBA. Table 4 lists the α values for each fitment type.

Table 4: Fitment Rating Score for EBA

Fitment Type	Details	Fitment Rating Score, α
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 both 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

6 FITMENT RATING SCORE FOR SEATBELT REMINDER SYSTEM

6.1 The Seatbelt Reminder (SBR) system is part of the overall Safety Assist score. From 2012 to 2016, ASEAN NCAP only considered the SBR system for driver and front passenger as a prerequisite for 5-star AOP rating.

6.2 Starting from 2017, as an encouragement for vehicle manufacturers, incentive is given to vehicles fitted with rear SBRs in addition to frontal SBRs. This is part of ASEAN NCAP's mission to increase the wearing rates among rear passengers beyond the legislative approach. The total *TFS* for the SBR system is 6 points.

6.3 There are six fitment types applied for the SBR system. Table 5 lists the α values for each fitment type.

Table 5: Fitment Rating Score for SBR System

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with SBR for driver, front passenger and rear passengers with seat occupant's detection as standard equipment	1
Option B	Vehicle model is equipped with SBR for driver, front passenger and rear passengers as standard equipment	0.75
Option C	Vehicle model is equipped with SBR for driver and front passenger as standard equipment but rear passengers as optional equipment	0.625
Option D	Vehicle model is equipped with SBR for driver and front passenger only as standard equipment	0.5
Option E	Vehicle model is equipped with SBR for driver only as standard equipment	0.25
Option F	Vehicle model is not equipped with SBR	0

7 FITMENT RATING SCORE FOR AUTONOMOUS EMERGENCY BRAKING CAR TO CAR SYSTEM

7.1 In the 2021 to 2025 protocol, ASEAN NCAP started assessing Auto Emergency Braking (AEB) Technology; which is a feature to alert drivers to an imminent crash and help them use the maximum braking capacity of the car.

7.2 AEB Car to Car Rear static (CCRs), Car to Car moving (CCRm) and Car to Car braking (CCRb), are part of the overall Safety Assist score. ASEAN NCAP believes that AEB is an important technology, which has been well-received by most car manufacturers. The *TFS* for AEB CCRs is fixed at 2.5 points, however AEB CCRm been increased from 3.5 points to 5 points with the addition of CCRb.

7.3 There are three fitment types applied for AEB. Table 6, Table 7 and Table 8 list the α values for each fitment type.

Table 6: Fitment Rating Score for AEB CCRs

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with AEB CCRs as standard equipment	1
Option B	Vehicle model is equipped with AEB CCRs as optional equipment	0.5
Option C	Vehicle model is not equipped with AEB CCRs	0

Table 7: Fitment Rating Score for AEB CCRm

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with AEB CCRm as standard equipment	1
Option B	Vehicle model is equipped with AEB CCRm as optional equipment	0.5
Option C	Vehicle model is not equipped with AEB CCRm	0

Table 8: Fitment Rating Score for AEB CCRb

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with AEB CCRb as standard equipment	1
Option B	Vehicle model is equipped with AEB CCRb as optional equipment	0.5
Option C	Vehicle model is not equipped with AEB CCRb	0

8 FITMENT RATING SCORE FOR LANE SUPPORT

8.1 Lane support systems are becoming increasingly widespread and ASEAN NCAP has acknowledged their safety potential to be put in Safety Assist assessment. This is a new assessment introduced in the 2026-2030 protocol.

8.2 Lane support is part of the assessment in the safety assist pillar. The total score for lane support is 2 points. It consists of two assessments, Lane Keep Assist (LKA) and Lane Departure Warning (LDW). The total score for LKA is 1.5 points, while LDW is 0.5 points. Table 8 lists the α values for each fitment type.

Table 9: Fitment Rating Score for Lane Support

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with Lane Support as standard equipment	1
Option B	Vehicle model is equipped with Lane Support as optional equipment	0.5
Option C	Vehicle model is not equipped with Lane Support	0

9 FITMENT RATING SCORE FOR ADVANCED SAFETY ASSIST TECHNOLOGIES

9.1 ASEAN NCAP realizes the importance of increasing the number of Advanced Safety Assist Technologies (SATs) in the region. With that in mind, the manufacturer may choose to obtain a maximum score of 2 points from two options with one of the options through FRS.

9.2 There are two fitment types applied for each Advanced SATs. The *TFS* for each Advanced SATs is 1 point. Table 10 lists the α values for each fitment type.

9.3 There is no limit to the number of Advanced SATs to be proposed. Nevertheless, the maximum score allocated for

Advanced SAT is 2 points. If the total point is more than 2 points, the maximum score for this section remains 2 points.

Table 10: Fitment Rating Score for Advanced SATs

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with Advanced SAT as standard or optional equipment	1
Option B	Vehicle model is not equipped with Advanced SAT	0

10 FITMENT RATING SCORE FOR BLIND SPOT TECHNOLOGY

10.1 Blind Spot Technology (BST) is part of the overall Motorcyclist Safety score. With the mission to reduce the number of lane-changing or merging crashes especially involving motorcyclists, ASEAN NCAP has introduced additional incentives for vehicle models equipped with BST.

10.2 This is part of ASEAN NCAP’s strategic approach in curbing the number of accidents and injuries involving motorcycles in the region. The *TFS* for BST is 8 points.

10.3 There are five fitment types applied for BST. Table 11 lists the α values for each fitment type.

Table 11: Fitment Rating Score for BST

Fitment Type	Details	Fitment Rating Score, α
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

11 FITMENT RATING SCORE FOR ADVANCED REAR VISUALIZATION

11.1 ASEAN NCAP is also of the opinion that collisions with motorcyclists can be avoided if a car driver is more alert of his surroundings within a 30-meter radius. Hence, Advanced Rear Visualization (ARV) technology will help in determining the presence of motorcycles and other small vehicles.

11.2 This is part of ASEAN NCAP's strategic approach in curbing the number of accidents and injuries involving motorcycles in the region whereby ARV shall aid and improve

the driver's view as a tiny camera is placed at the rear end (displayed on top of the rear mirror) of the car.

11.3 ASEAN NCAP has introduced additional incentives for vehicles model equipped with ARV. The *TFS* for RVT is 3 points.

11.4 There are three fitment types applied for ARV. Table 12 lists the α values for each fitment type.

Table 12: Fitment Rating Score for ARV

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with ARV as standard equipment	1
Option B	Vehicle model is equipped with ARV as optional equipment	0.5
Option C	Vehicle model is not equipped with ARV	0

12 FITMENT RATING SCORE FOR AUTO HIGH BEAM

12.1 In the ASEAN context, it is found that in certain areas, the condition of motorcycles on the road is not up to the mark whereby some of their equipment is not in working order. For example, the headlight or the tail light might not work.

12.2 Such an issue pertaining to the conspicuousness of motorcyclists will definitely result in a dangerous situation; which could eventually lead to road crashes. Perchance, with the Auto High Beam (AHB) function, this problem may reach a

solution and in turn may result in a reduction of motorcyclist fatality in the ASEAN region.

12.3 In the 2021-2025 protocol, ASEAN NCAP has introduced incentives for vehicle models equipped with AHB which is part of the overall Motorcyclist safety score. *TFS* scores for AHB are 2 points. Adaptive Driving Beam (ADB) improved the visibility of the driver thus ASEAN NCAP is rewarding an additional 1 point for the vehicle equipped with this technology.

12.4 There are three fitment types applied for AHB. Table 13 lists the α values for each fitment type.

Table 13: Fitment Rating Score for AHB

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with ADB as standard equipment	1
Option B	Vehicle model is equipped with ADB as optional equipment but AHB as standard equipment	0.80
Option C	Vehicle model is not equipped with ADB but equipped with AHB as standard equipment	0.667

Option D	Vehicle model is equipped with ADB as optional and AHB as optional equipment	0.584
Option E	Vehicle model is equipped with ADB as optional equipment and not equipped with AHB	0.5
Option F	Vehicle model is not equipped with ADB but equipped with AHB as optional equipment	0.333
Option G	Vehicle model is not equipped with either AHB or ADB	0

13 FITMENT RATING SCORE FOR PEDESTRIAN PROTECTION

13.1 Pedestrian Protection has been introduced in Motorcyclist Pillar since 2021. It is important in protecting vulnerable road user including pedestrian and motorcyclist. In order to score the point, vehicle need to pass UN R127 regulation.

13.2 In the 2026-2030 Protocol, vehicle need to pass UN R127-03 in order to score point for pedestrian protection. It introduced additional point toward windscreen for the latest revision of the regulation.

13.3 However, the current regulation UN R127-02 will be accepted until December 2027 before fully implementation of revision 03.

13.4 There are three fitment types applied for pedestrian protection. Table 14 lists the α values for each fitment type (until December 2027). Table 15 lists the α values for each fitment type from January 2028.

Table 14: Fitment Rating Score for Pedestrian Protection until December 2027

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is meet Pedestrian Protection (UN R127-03)	1
Option B	Vehicle model is meet with Pedestrian Protection (UN R127-02)	0.5
Option C	Vehicle model is not meet with Pedestrian Protection (UN R127)	0

Table 15: Fitment Rating Score for Pedestrian Protection from January 2028

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is meet Pedestrian Protection (UN R127-03)	1
Option B	Vehicle model is not meet with Pedestrian Protection (UN R127)	0

14 FITMENT RATING SCORE FOR AEB CAR TO MOTORCYCLIST (AEB MC)

14.1 In the 2026-2030 protocol, ASEAN NCAP additional focus on Autonomous Emergency Braking (AEB) Technology; which is a feature to alert drivers to an imminent crash and help them use the maximum braking capacity of the car to avoid collisions with motorcycles.

14.2 AEB Car to Motorcyclist (AEB MC) is part of the overall Motorcyclist Safety score. ASEAN NCAP believes that AEB MC is an important technology, which has been well-received by most car manufacturers. The *TFS* for AEB MC is 6 points.

14.3 There are three fitment types applied for AEB MC. Table 16 lists the α values for each fitment type.

Table 16: Fitment Rating Score for AEB MC

Fitment Type	Details	Fitment Rating Score, α
Option A	Vehicle model is equipped with AEB MC as standard equipment	1
Option B	Vehicle model is equipped with AEB MC as optional equipment	0.5
Option C	Vehicle model is not equipped with AEB MC	0

15 FITMENT RATING SCORE FOR ADVANCED MOTORCYCLIST SAFETY TECHNOLOGIES

15.1 ASEAN NCAP realizes the importance of increasing the number of Advanced Motorcyclist Safety Technologies (MSTs) in the region. With that in mind, the manufacturer may choose to obtain a maximum score of 2 points from two options with one of the options through FRS.

15.2 There are two fitment types applied for each Advanced MSTs. The *TFS* for each Advanced MSTs is 1 point. Table 16 lists the α values for each fitment type.

15.3 There is no limit to the number of Advanced MSTs to be proposed. Nevertheless, the maximum score allocated for

Advanced MSTs is 2 points. If the total point is more than 2 points, the maximum score for this section remains 2 points.

Table17: Fitment Rating Score for Advanced MSTs

Fitment Type	Details	Fitment Rating Score, <i>a</i>
Option A	Vehicle model is equipped with Advanced MST as standard or optional equipment	1
Option B	Vehicle model is not equipped with Advanced MST	0

Editors

Ts. Yahaya Ahmad
Malaysian Institute of Road Safety Research (MIROS)

Hamizah Makhpol
Malaysian Institute of Road Safety Research (MIROS)

Ir. Mohd Syazwan Solah
Malaysian Institute of Road Safety Research (MIROS)

Dr. Fauziana Lamin
Malaysian Institute of Road Safety Research (MIROS)

Ts. Noor Faradila Paiman
Malaysian Institute of Road Safety Research (MIROS)

Ts. Mohd Amirudin Mohamad Radzi
Malaysian Institute of Road Safety Research (MIROS)

Ts. Nurulhana Borhan
Malaysian Institute of Road Safety Research (MIROS)

Najwa Shaari
Malaysian Institute of Road Safety Research (MIROS)

Ts. Zulhaidi Mohd Jawi
Malaysian Institute of Road Safety Research (MIROS)

Salina Mustaffa
Malaysian Institute of Road Safety Research (MIROS)

Ainul Bahiah Mohd Khidzir
Malaysian Institute of Road Safety Research (MIROS)

Assoc. Prof. Ts. Dr. Siti Zaharah binti Ishak
Malaysian Institute of Road Safety Research (MIROS)

ASEAN NCAP **PROTOCOL**

2026-2030



ASEAN NCAP

c/o MIROS

Ground Floor, Lot 127,
Jalan TKS 1,
Taman Kajang Sentral,
43000 Kajang,
Selangor, Malaysia.



+603-8924 9200



aseancapmedia@miros.gov.my



www.aseancap.org



<https://www.facebook/AseanNcap>



<https://twitter.com/aseancap>



<https://www.instagram.com/aseancap>



<https://www.tiktok.com/@aseancap>



<https://www.youtube.com/@aseancapofficial>

