

# APPLICATION OF STAR RATINGS

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**ASEAN NCAP  
PROTOCOL**  
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## **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.

# **ASEAN NCAP APPLICATION OF STAR RATINGS**

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

## ASEAN NCAP APPLICATION OF STAR RATINGS

### 1 INTRODUCTION

This document shall define the technical aspects concerning the continued validity of ASEAN NCAP's star rating, as well as the assessment of model variants, partner models and corporate twins. Manufacturers should also be careful to observe the requirements of ASEAN NCAP's "ASEAN NCAP Application of Star Ratings".

Starting from January 1, 2026, all new ASEAN NCAP star ratings will be subject to this Application of Star Ratings Protocol.

### 2 DEFINITIONS

**'Make (brand)'**: The make of a motor vehicle must be the marque/brand or the name by which that range of motor vehicles is popularly known, or the name of the manufacturer.

**'Model Name'**: the name by which the vehicle is advertised or sold.

**'Variant'**: is a version of the originally-tested vehicle which shares

- Make (brand)
- Model Name (additional descriptions such as ‘hatch’, sports wagon, etc. are allowed as long as the basic model’s name remains the same)
- All equipment having an influence on safety.
- All-important structural elements related to safety performance. Where these differ (number of side entry doors, for example), additional data is required.

and which can be shown not to differ from the originally tested vehicle in terms of the ASEAN NCAP star rating (see 6.2 for a full description).

**‘Partner’:** has the same relationship to the originally tested vehicle as a variant (same brand) but has a different model name. All important structural elements related to safety performance must be the same as the originally tested vehicle. Where these differ, additional data is required. Safety equipment and its fitment must be the same as the originally tested vehicle. See 6.4 for a full description.

**‘Corporate Twins’:**

- are identical to each other in every aspect except for Make and Model name, i.e., they are examples of pure ‘badge engineering.’ Visually they are identical, making it clear to consumers that they are, in effect, the same vehicle.

- may differ with minor styling changes such as front panels, grille, and headlights, but are identical in all other regards including the fitment of safety equipment.

### **3 VALIDITY OF STAR RATING**

Once ASEAN NCAP has published the star rating and related information on its website, the vehicle has obtained a valid rating.

By default, the star rating remains valid for a maximum period of 6 years following the release of the result. The rating scheme is expected to change so significantly during this period that referring to an older result would mislead consumers.

If during this period the specification of the rated vehicle or safety pack alters, for instance because standard equipment is deleted or made optional, the rating may become invalid earlier. To monitor changes to rated vehicles, ASEAN NCAP will apply Random and Facelift Reviews (see Section 4).

In some circumstances the star rating may be carried over from the original test model to a facelifted model, another model variant or twin model. Specific conditions apply as laid out in Sections 6 and 7, respectively.

## **4 RANDOM AND FACELIFT REVIEWS**

4.1 All vehicles will be subject to a random review of their ratings.

4.1.1 A vehicle's rating will be subject to a random review from the original rating is released until a maximum 6 years thereafter, to establish whether or not the original rating remains valid. The random review will comprise (for all variants and/or corporate twins covered by the rating):

- A check that the base safety equipment is unchanged.
- A check that the fitment of safety equipment met original requirements. This check will require information on total sales across the model range and evidence of the number of vehicles to which the safety equipment was fitted as standard equipment.

Note: Information from a third party should be provided to corroborate the sales figures (e.g. for an AEB system, information might be provided by the supplier of the radar or camera system used in that application).

4.1.2 ASEAN NCAP will provide a list to the vehicle manufacturer of all current assessments for which review forms should be completed, together with the date they are due. The completed form should be submitted to ASEAN NCAP approximately three to four weeks before the due date. The completed form will be reviewed by ASEAN NCAP and the manufacturer will be contacted if further information is required.

4.1.3 Failure to return or complete forms may lead to discontinuation of the star rating.

4.2 Where a vehicle with a valid overall star rating receives a facelift and the manufacturer wishes to carry over the rating from the original test, the following rules apply:

4.2.1 The vehicle manufacturer should contact ASEAN NCAP approximately four months before the release of the facelifted vehicle.

4.2.2 A ‘facelift review’ will be conducted by ASEAN NCAP to establish whether or not the original star rating can be transferred. This will comprise;

- A review of the changes that have been made to the vehicle.
- A review of in-house test data, where appropriate.

4.2.3 The application should be made even for ‘facelifts’ which have no influence, or a very minor influence, on the safety rating but where the appearance of the car has been altered or where the car is to be marketed as ‘new’. ASEAN NCAP intends to keep consumers informed of the applicability of the rating and any changes that distinguish the updated vehicle from the original should be reported.

4.2.4 It is the responsibility of the vehicle manufacturer to approach ASEAN NCAP with information concerning facelift

changes. If no information is received from the manufacturer, ASEAN NCAP may assume that the facelifted vehicle does not meet the requirements of the original star rating. The original star rating may no longer be valid, and the facelifted vehicle may be eligible for assessment.

## **5 TERMINATION OF STAR RATING**

5.1 The original star rating expires after 6 years or when the original rating is not considered valid for the vehicle on sale at the Random Review (e.g. original fitment rates not met in practice) or a Facelift Review.

5.2 In all cases where the rating has been terminated, the website will list the VIN up to which the rating is valid. Vehicles beyond this VIN will not be covered by the rating and the manufacturer's advertising should make no further reference to the rating. The ratings and related information will remain on the website for reference in the used car market.

## **6 VARIANTS AND PARTNER MODELS**

### **6.1 Main Assessment**

6.1.1 ASEAN NCAP will test a single variant, as identified using the Vehicle Specification, Selection, Testing and Retesting (VSSTR) protocol. As part of its assessment of the vehicle, ASEAN NCAP will request the manufacturer to provide data

demonstrating the equivalent safety performance of the opposite hand of drive to the one tested (e.g. RHD if LHD tested).

## **6.2 Application of Star Rating to Other Variants**

6.2.1 Variants will be considered to share the rating of the tested vehicle if the manufacturer can provide data/information demonstrating, to the satisfaction of the technical leader, that all of the requirements set out in Appendix 1 are met.

6.2.2 In-house data is acceptable to demonstrate compliance with the requirements of Appendix 1, except where official tests are explicitly demanded in that Appendix.

6.2.3 ASEAN NCAP reserves the right to request additional information to the above.

## **6.3 Variants Not Covered by the Rating**

6.3.1 Any variants that do not meet the requirements of 6.2 will be considered not to be covered by the star rating and will be marked as such in the website table.

## **6.4 Partner Models**

6.4.1 Certain variants may be marketed under a different model name to the originally-tested vehicle. Manufacturers may apply for the star rating to be applied to such ‘partner models’ following the procedures set out in 6.2.1 to 6.2.3.

6.4.2 The Manufacturer must inform ASEAN NCAP of its intention to apply for a ‘partner’ rating at the time of application for assessment of the tested model.

## **6.5 Timing**

### **6.5.1 Variants**

6.5.1.1 Manufacturers may apply for the star rating to be applied to other variants in years later than the one in which the rating was originally published. In such cases, no consideration will be given to the requirements in place at the time of the new application, only those which applied at the time of the original rating. Manufacturers should provide data in support of any application as described in 6.2.1.

### **6.5.2 Partner Models**

6.5.2.1 A partner model may not share the original rating if it is released in a calendar year more than 2 years later than the date stamp of the original assessment. Manufacturers should provide data in support of any application as described in 6.2.1.

## **6.6 Comparison of Data**

6.6.1 The Manufacturer must explain any differences in test results that do not comply with the requirements for audit testing

set out in the Vehicle Specification, Selection, Testing and Retesting (VSSTR) protocol.

## **7 CORPORATE TWINS**

7.1 A vehicle's star rating can be applied to a Corporate Twin if:

7.1.1 ASEAN NCAP is satisfied that the Corporate Twin is, apart from Make and Model Name, identical to the vehicle tested in all ways related to safety.

7.1.2 The twin has the same base safety specification as the vehicle tested, or better.

7.1.2.1 The manufacturer may be asked to provide data/information satisfying the technical leader that all of the requirements set out in Appendix 1 are met.

7.1.2.2 In-house data is acceptable to demonstrate compliance with the requirements of Appendix 1, except where official tests are explicitly demanded.

7.2 The test model form should be completed for all brand models to which the rating will be applied.

7.2.1 The base safety specification and best-selling variant should be identified for each brand.

7.2.2 The manufacturer agrees to notify ASEAN NCAP of any changes to standard/optional fitment of safety equipment.

7.3 Documentation should be submitted to ASEAN NCAP which highlights differences, if any in

- Manufacturing plants.
- Suppliers of safety equipment.
- Powertrain options.

7.4 Where very minor differences exist, the twin with the lowest base safety specification or the poorer performance will be assessed.

7.5 All twins should be made available, on request, for strip-down/parts check at the time of inspection or before.

7.6 Manufacturers must ask for other brand models to be considered as corporate twins at the time the original assessment is to be done. Retrospective applications for twins to ‘share’ the original rating will not be considered.

7.7 Data for publication on the corporate twin will be taken from the original model tested. ASEAN NCAP will make no distinction between the models.

7.8 Twins must have the same date stamp on the rating.

## APPENDIX I

Requirements for transfer of rating to Variants, Partner Models and Corporate Twins.

Note: Additional evidence is required for model variants failing to meet the criteria set out in the tables below. Additional evidence is test data produced in accordance with ASEAN NCAP protocols. In-house data is acceptable, except where official tests are explicitly demanded.

Table 1: Adult Occupant Protection

Factor	Criterion
a) Body style (same number of side entry doors)	For assessment, a transverse vertical plane is defined that is 500mm rearward of the upper seat belt anchorage point for the driver seat. Forward of this plane variants must be identical in design and structure for crashworthiness purposes. Drawings showing overlay of structures should be provided. This includes the front seat belt anchorages but not rear seat belt anchorages.

<p>b) Body style (different number of side entry doors)</p>	<p>Where a variant differs from the tested vehicle in the number of side entry doors (e.g. a 3 door where a 5 door was tested, or vice versa), and its front-end structure is identical for crashworthiness purposes, additional evidence must be provided (side AE-MDB). For variants (same brand, same model name) in-house data may be provided. For partner models (same brand, different model names), official ASEAN NCAP tests must be done.</p> <p>The same rating can be used for the variant or partner in question if the results of the test are comparable, for adult and child dummies, with those of the originally-tested vehicle.</p> <p>If the shape or H point of the rear seats is different from the tested variant, additional evidence may be requested to demonstrate equivalent performance for the full-width test.</p>
<p>c) Kerb mass</p>	<p>Variation up to <math>\pm 10\%</math> of the mass of the frontal ODB test vehicle is allowed, provided the car does not receive a modifier for bodyshell instability. Further evidence may be required in</p>

	<p>cases where the modifier has not been applied but the stability is considered marginal. For variants where the maximum kerb mass (i.e. including all options, safety-related or otherwise) is between 10 and 20 percent more or less than the mass of the frontal ODB test vehicle, in-house data for the frontal ODB and side AE-MDB tests should be provided. Where the maximum kerb mass is greater than 20 percent more or less than the mass of the ODB test vehicle, the manufacturer must perform additional official frontal ODB and side AE-MDB tests at the ASEAN NCAP laboratory.</p>
<p>d) Engine (displacement, cylinder configuration, aspiration, block size, type of fuel)</p>	<p>For internal combustion (IC) engines, the same block size &amp; configuration are allowed, irrespective of displacement, aspiration and fuel. Extra components within the engine bay such as LPG convertors and turbo-chargers are acceptable provided that footwell and pedal intrusion are well controlled in the tested vehicle (i.e. 4 points scored for driver's feet and there is no footwell rupture).</p> <p>Note that a 4 cylinder result cannot be used for a V6 result and a V6 result</p>

	<p>cannot be used for a V8, and vice versa, without additional evidence (in-house or official ASEAN NCAP frontal ODB test).</p> <p>For electric and hybrid vehicles (where an IC variant was originally tested), additional official ASEAN NCAP tests are needed for frontal ODB. Additional factors are checked during tests of electric vehicles, such as battery integrity, so results of IC variants cannot be transferred.</p>
<p>e) Transmission (manual or auto, number of gears)</p>	<p>Any transmission is acceptable.</p>
<p>f) Driven wheels (4x4, 4x2, front-wheel drive, rear wheel drive)</p>	<p>Two-wheel drive results (either front or rear) are not interchangeable with an all-wheel-drive variant without additional evidence (frontal MPDB test) due to the effect of the rear driveline. Similarly, front-wheel drive results are not interchangeable with rear-wheel-drive results, without additional evidence.</p> <p>Driven wheel differences are acceptable for the side impact test.</p>

<p>g) Ride height (e.g. height of top of wheel arch) and tyre diameter</p>	<p>In general, a difference of +/-50mm from the tested variant is acceptable for both the frontal ODB test and the side AE-MDB test. However, manufacturers should submit data illustrating where critical structures are positioned relative to the deformable elements in these tests. The technical leader may require additional evidence. In any case, additional evidence for the AE-MDB test is required where the ride height is more than 50mm lower than the tested variant.</p>
<p>h) Wheelbase</p>	<p>Wheelbase variation up to <math>\pm 10\%</math> is acceptable. Additional evidence (frontal ODB test) is required for larger variations.</p>
<p>i) Driver location (left-hand drive, right-hand drive)</p>	<p>Manufacturers will be asked, as part of the routine assessment of the vehicle, to provide evidence to demonstrate equivalence in results between the hand of drive tested and the opposite hand of drive.</p>
<p>j) Occupant restraint systems</p>	<p>Seat design must have similar restraint-related features, such as anti-submarining pans. Upholstery and adjustment features may vary. Where</p>

	<p>restraint systems differ, additional evidence is required (additional evidence required may vary depending on the extent of differences).</p>
<p>k) Third row seats</p>	<p>Official ASEAN NCAP tests are needed for the following: CRS installation; SBR.</p> <p>If points are lost relative to the tested variant in any of these assessments, the score of the poorer performing variant will be used for</p> <ul style="list-style-type: none"> <li>• Variants (as they share the assessment on the website)</li> <li>• Partners which share a common assessment on the website.</li> </ul> <p>For partner models which have separate assessments on the website, the appropriate results will be separately shown.</p> <p>Where the H point of seats in the second row are different from those of the tested variant, the OEM must supply additional data demonstrating equivalent performance in the frontal ODB test and the side AE-MDB test.</p>

Table 2: Child Occupant Protection

<b>Factor</b>	<b>Criterion</b>
a) Shape of rear bench	Where the rear seats differ from those in the tested variant, in shape, style or H-point, the OEM must provide data on these differences and additional evidence may be requested to demonstrate equivalent performance for child dynamic tests and CRS installation.
b) Pretensioners and load-limiters	Where the rear restraints differ from those in the tested variant, additional evidence should be submitted to demonstrate equivalent performance for child dynamic tests and CRS installation.
c) Third row seats	Official ASEAN NCAP CRS installation check needed. Results presented as explained in Adult Occupant Protection, item (j).

Table 3: Safety Assist

Factor	Criterion
<p>a) AEB Car-to-Car / AEB Car to Motorcycle</p>	<p>Where an AEB system was awarded points, other variants must use the same components, human machine-interface and software as the system tested by ASEAN NCAP:</p> <p>To transfer the rating from the tested variant:</p> <ul style="list-style-type: none"> <li>i. functional components (e.g. LIDAR, radar transmitter &amp; receiver, and mono or stereo cameras) must be the same brand, model and series as tested by ASEAN NCAP</li> <li>ii. AEB software must be the same or a later version than that tested by ASEAN NCAP.</li> <li>iii. all transmitter, receiver and camera locations must be the same as those tested by ASEAN NCAP.</li> </ul> <p>Where these conditions are not met additional evidence (AEB Inter-Urban) is required demonstrating that the system has the same or better</p>

	<p>performance than the system tested by ASEAN NCAP.</p>
<p>b) Lane Support Systems</p>	<p>Where a LSS system was awarded points, other variants must be equipped with a system of the same type (LDW/LKA) that uses the same components, human machine-interface and software as the system awarded points by ASEAN NCAP.</p> <p>Where these conditions are not met additional evidence (LSS) is required.</p>

## APPENDIX 2

Table 2.1: Expiry of ASEAN NCAP Pathway and Roadmap Ratings

<b>ASEAN NCAP 'Assessment Year'</b>	<b>Expiry Timing</b>	<b>Eligible for Reassessment<sup>1</sup></b>
2026	Dec 2032	Jan 2033
2027	Dec 2033	Jan 2034
2028	Dec 2034	Jan 2035

Notes:

<sup>1</sup> The “Eligible for Reassessment” time will only remain valid if during this period the safety specification of the rated vehicle is not altered prior to this date.

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# ASEAN NCAP PROTOCOL

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## 2026-2030



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