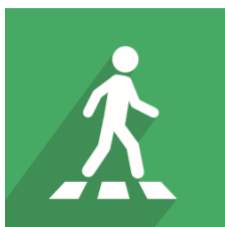




**LATIN AMERICAN & CARIBBEAN  
NEW CAR ASSESSMENT PROGRAMME  
(Latin NCAP)**



**ASSESSMENT PROTOCOL – OVERALL RATING  
2025 - 2029**

Version 2.0.0  
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## **ACKNOWLEDGEMENT**

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## 1 INTRODUCTION

The Latin NCAP programme is designed to provide a fair, meaningful and objective assessment of the impact performance of cars and provide a mechanism to inform consumers.

In 2020 Latin NCAP introduced relevant changes to the Assessment protocols such as the overall rating scheme and together with it, pedestrian, whiplash, and safety assist systems assessment such as AEB. This current protocol continues in the same line while adding other relevant areas of assessment. Individual documents are released for the four main areas of assessment:

- Assessment Protocol – Adult Occupant Protection.
- Assessment Protocol – Child Occupant Protection.
- Assessment Protocol – Pedestrian Protection.
- Assessment Protocol – Safety Assist.

In addition to these four assessment protocols, this separate document describes the method and criteria by which the overall safety rating is calculated on the basis of the car performance in each of the above areas of assessment.

Finally, Latin NCAP *Car Sponsorship Testing and Retesting Protocol (CSSTR)* details the conditions under which vehicles are tested, the validity of the results, timeline and lead times for nominating a vehicle, general procedures for discussions previous to the result publications as well as communications procedures.

DISCLAIMER: Latin 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, Latin NCAP reserves the right to make corrections and determine the assessment and subsequent result of the affected requirement(s).

## 2 METHOD OF ASSESSMENT

The overall rating is composed of scores achieved in the four areas of assessment, also referred to as “boxes”: Adult Occupant, Child Occupant, Pedestrian Protection and Safety Assist. The score in each box is based on the car performance in different tests. The overall star rating will be determined by the lowest of the scores in the four boxes. Vehicles that show a poor performance in one of the boxes will have their star rating restricted to show that they do not provide good all-round protection however consumers will be informed about the percentage of the full score achieved in each box.

For each box, a total score is calculated by adding all points for each of tests<sup>1</sup>. The total score for the respective box is then normalized with respect to the maximum achievable score available for the box. In this way, the maximum score for each box, and hence the total maximum score, is a constant. Weight balance factors between the boxes will not be introduced in this protocol.

### 2.1 Star Rating Limits and Balance Criteria

The following rounding rules will be applied in the calculation of the overall rating.

- Data is entered to 2 decimal places.
- Intermediate calculations (e.g. calculations needed to derive parameters which are then used to calculate scores) are not rounded.
- Calculation of points scores (e.g. for individual body regions) are rounded to 3 decimal points e.g. a head score of 3.1238 in frontal impact would be rounded to 3.124.
- The total points score in each box is the sum of scores rounded to 3 decimal points. To calculate the percentage score in each box, the 3 decimal points total is divided by the maximum points available for that box and the resulting percentage is rounded down to the nearest integer. In the example case:  $25.124 / 40 * 100\% = 62.810$  is rounded to 62%.
- That integer is then compared with the balance percentage thresholds for the box in Table 1. In the example case, 62% qualifies for 2 stars AOP in 2026.

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<sup>1</sup> In specific cases where certain tests that are required to be sponsored by the manufacturer are not performed, score will be zero for that test or item.

**Table 1 - Balance limits for year 2025 - 2027**

2025 - 2027	<b>Box 1: Adult Occupant</b>	<b>Box 2: Child Occupant</b>	<b>Box 3: Pedestrian Protection</b>	<b>Box 4: Safety Assist</b>
5 stars	80%	75%	65%	85%
4 stars	75%	65%	60%	75%
3 stars	65%	55%	50%	65%
2 stars	50%	30%	25%	50%
1 star	40%	15%	10%	50%

**Table 2 - Balance limits for year 2028 - 2029**

2028 - 2029	<b>Box 1: Adult Occupant</b>	<b>Box 2: Child Occupant</b>	<b>Box 3: Pedestrian Protection</b>	<b>Box 4: Safety Assist</b>
5 stars	85%	80%	70%	90%
4 stars	75%	70%	65%	75%
3 stars	65%	60%	50%	65%
2 stars	50%	30%	25%	50%
1 star	40%	15%	10%	50%

## 2.2 Fitment Rates

### 2.2.1 AEB Car to Car, AEB VRU and LSS

Fitment rates will be established per year, with a minimum sales volume. Additionally, the AEB Car to Car, AEB VRU and LSS systems will be required to be offered in all markets as a stand-alone-optional or as a part of a safety technical package to be pre-approved by Latin NCAP. Some markets exemptions under special circumstances will be considered but enough proof must be presented to Latin NCAP as a justification for the exemption<sup>2</sup>. The stand-alone-optional requirement for technologies which use same hardware can be considered as stand-grouped-optional. Failing to comply with these requirements will result in an immediate rating adjustment.

Latin NCAP will only consider fitment rates for new driver assistance technologies like AEBs and LSS

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<sup>2</sup> Market exemptions will only be considered in the case of extraordinary reasons where the implementation of the technology is explicitly not possible. Corporate decisions due to economic reasons will not be accepted.

as well as eCall, ISA, Driving Monitoring Systems (DMS) and Child Presence Detection (CPD). All remaining technologies such as ESC, SBR, BSD And Manual Speed Assist are not considered for fitment rate and must be fitted as standard across all variants of the vehicle model.

2025 to 2027: AEB and LSS performances assessed and scored according to 2020-2025 protocols will require 100% (standard fitted) as fitment rate for scoring. Criteria for AEB and LSS assessment should be selected by the car manufacturer prior to the assessment.

The following fitment rates will be considered for AEB and LSS technologies:

<b>AEB Car to Car (C2C)<sup>3</sup></b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Stand-alone optional</b>	50%	60%	70%	80%
<b>Percentage of Total Sales</b>	70 %	80%	90%	100%

<b>AEB Vulnerable Road Users (VRU)<sup>4</sup></b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Stand-alone Optional</b>	50%	60%	70%	80%
<b>Percentage of Total Sales</b>	70 %	80%	90%	100%

<b>Lane Support Systems (LSS)<sup>5</sup></b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Stand-alone Optional</b>	50%	60%	70%	80%
<b>Percentage of Total Sales</b>	70 %	80%	90%	100%

**Standalone optional** means that the technology must be available in all markets where the model is sold and within each market, for all variants of the model. Also, it cannot be offered in a package with other features or technologies unless there is solid technical evidence that the bundled features cannot be separated from each other. When the technology is offered under an approved technical safety package, the whole safety package must meet the stand-alone requirements mentioned above.

**Percentage of Total sales** means that the percentage of total sales volume for all of the Latin NCAP markets considered together should match the one indicated in the table and in each market where the model is sold, and at least 2 variants should be fitted with standard equipment of that

<sup>3</sup> Includes all urban and inter-urban scenarios as described in Latin NCAP Safety Assyst protocol 2025.

<sup>4</sup> Includes all adult, child and bicycle scenarios as described in Latin NCAP Pedestrian protection protocol 2025.

<sup>5</sup> As described in Latin NCAP Safety Assyst protocol 2025.

technology.

In both cases the % fitted with AEB or LSS includes all variants of the car such as single cab versions and must not decrease from the car publication date.

For **2025, 2026 and 2027** AEB (C2C and VRU) or LSS points can still be scored when assessed according to Latin NCAP 2020 protocols<sup>6</sup> in the case that they are fitted as standard in all units across all Latin NCAP markets where the model is sold. AEB City and Interurban scores, as referred in Latin NCAP 2020 protocols, will be combined and will score under the AEB C2C item in the Safety Assyst box of the 2025 protocol. **The manufacturer must communicate to Latin NCAP its decision for scoring AEB (C2C and VRU) or LSS under 2020 assessment protocols ahead of any assessment.**

### Examples

- For **2026** AEB VRU is offered as standalone optional meaning it can be individually added to any version purchased in all Latin NCAP markets where the model is sold, independent of any other feature or technology available and the total sales volume across all Latin NCAP markets where the car is sold is 55% → AEB VRU availability preconditions met and the technology is eligible for scoring.
- For **2026** AEB C2C is offered in units covering 95% of the total Latin NCAP market sales, only in Mexico where the car is sold, it is not offered with AEB C2C in any variant → AEB VRU availability preconditions not met and the technology is not eligible for scoring.
- For **2027** LSS system is fitted as standard in all units sold in Brazil which represents 85% of the total Latin NCAP market sales for that model. Also, the LSS system is present in two variants of the model in all the other markets the car is sold → LSS availability preconditions met and the technology is eligible for scoring.

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<sup>6</sup> Please refer to Latin NCAP testing protocols document.



### 2.2.2 Intelligent Speed Assist (ISA), eCall, Child Presence Detection (CPD) and Driver Monitoring Systems (DMS)

For Intelligent Speed Assyst, eCall, Child Presence Detection and Driver Monitoring Systems the following fitment rates will be required to score:

<b>Intelligent Speed Assist (ISA)</b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Percentage of Total Sales</b>	50 %	60%	70%	80%

For ISA to be eligible for scoring, the % of total sales not fitted with ISA must meet the MSA requirements as described in Latin NCAP SA Assessment protocol.

<b>Child Presence Detection (CPD)</b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Percentage of Total sales</b>	50 %	65%	80%	95%

<b>Driver Monitoring Systems (DMS)</b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Percentage of Total sales</b>	50 %	65%	80%	95%

No standalone option is required for ISA, CPD or DMS, but the feature must be present in all countries where the model is sold in at least one variant.

<b>eCall systems</b>				
	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Stand-alone Optional</b>	30 %	45%	60%	75%

eCall systems must be offered as stand-alone feature as described in 2.2.1 and comply with the requirements specified in the latest version of Latin NCAP Adult Occupant Protection Assessment Protocol.