



PRESS RELEASE

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ASEAN NCAP – SAFER CARS FOR ASEAN REGION

The 2023 Toyota Vios Achieved 5-Star Under the 2021-2025 Protocol

Kajang, Malaysia, 8 September 2023 – The New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP) assessed the recently launched All-New Toyota Vios. When ASEAN NCAP first began in 2011, the Toyota Vios was one of the first eight models that were assessed under its Phase 1 assessment programme, which covered two categories namely Adult Occupant Protection (AOP) and Child Occupant Protection (COP). ASEAN NCAP first tested the Toyota Vios in 2012 where the model obtained 4-Star ASEAN NCAP rating with a total score of 13.61 / 16.00 points for the AOP category and it achieved 48% compliance for the COP assessment. ASEAN NCAP then conducted the second assessment on the sedan for its 2018 model under the 2017-2020 assessment protocol. The 2018 Vios was awarded with 5-Star rating in this assessment in which the overall score of 18.41 points was an accumulation from the AOP, COP and Safety Assist (SA) assessment categories.

The All-New Toyota Vios for 2023 made another **5-Star** performance in the ASEAN NCAP assessment under the current protocol for 2021-2025. In this latest assessment, the new Vios obtained a total score of **78.70 points** with the **AOP category receiving 35.25 points, the COP received 16.64 points**, the Vios obtained **16.08 points under the SA category** and it received **10.73 points for the Motorcyclist Safety (MS) assessment category**.

The All-New Toyota Vios offers 6 airbags as standard in majority of its markets with an exception of one of its markets that offers only 2 airbags. The sedan is equipped with Electronic Stability Control (ESC), Anti-lock Braking System (ABS), Seatbelt Reminder System (SBR) for both frontal and rear seats occupants and Pedestrian Protection technology as standard fitment in all its variants. In addition, there are a number of safety assist technologies available in the new Vios either as standard or optional equipment comprising Autonomous Emergency Braking (AEB) City, AEB Inter-Urban, AEB Pedestrian, Lane Departure Warning (LDW), Forward Collision Warning (FCW), Lane Keep Assist (LKA), Blind Spot Detection (BSD) on both sides of the vehicle and Auto High Beam (AHB).

The Toyota Vios is an entry level market model under the Toyota brand and currently one of the most popular models in South East Asia. ASEAN NCAP is proud to have the chance to observe its incredible development beginning from the first assessment that ASEAN NCAP performed on the model in 2012 until now. ASEAN NCAP is pleased that Toyota is committed to ensure the safety of both the vehicle occupants and other road users by equipping the sedan with various safety assist technologies to protect them from unforeseen incidences while driving on the roads. The amazing transformation has indeed benefitted ASEAN road users and ASEAN NCAP extends our congratulations to Toyota for their commendable achievement to strive for better and improved vehicle safety.

The current ASEAN NCAP 2021-2025 assessment protocol covers four assessment domains with AOP covers 40.00 points of the overall score, and COP, SA and MS make up 20.00 points each of the overall score.

The following is the summary result of the new Toyota Vios (2023).

- ❖ The All-New Toyota Vios (2023) performed remarkably well in this latest assessment in which it achieved a total score of **78.70 points**. The points were accumulated from the four assessment categories under the ASEAN NCAP 2021-2025 protocol that are **35.25 points** for AOP category, **16.64 points** for COP, **16.08 points** for SA category and **10.73 points** for MS. Based on this assessment overall score, the Vios is eligible to receive **5-Star** ASEAN NCAP rating.



ASEAN NCAP

ASEAN NCAP is the latest 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).

Overview of ASEAN NCAP Roadmap 2021-2025

The first phase of ASEAN NCAP Roadmap 2021-2030 shall feature four pillars, namely Adult Occupant Protection (AOP), Child Occupant Protection (COP), Safety Assist (SA) and Motorcyclist Safety (MS).

For each of these pillars, there shall be additional elements and improvements to the previous rating systems as we strive toward an increased car safety standard to suit the ASEAN context.

❖ ***Adult Occupant Protection***

AOP will maintain two crash assessments, namely the frontal and side impact tests. There shall be no changes as regards the use of the dummy. However, ASEAN NCAP has amended the score for side impact; in the sense that it will be reduced by 50 percent whereas additional points will be rewarded for Head Protection Technology (HPT). Such a change will encourage fitment of more curtain airbags in the ASEAN region. Beginning in 2023, ASEAN NCAP will also include UN R135 as a prerequisite for HPT.

❖ ***Child Occupant Protection***

ASEAN NCAP shall introduce more local CRS in its vehicle based assessment compared with the previous rating system. This is to ensure that new cars sold in the region will follow the Southeast Asia CRS criteria. Another highlight of COP is the introduction of Child Presence Detection technology for a child left unattended in the car. Therefore, ASEAN NCAP shall be among the first NCAPs to encourage the use of such a technology aside from Euro NCAP which has already included it in their testing protocol.

❖ ***Safety Assist Technology***

In the new roadmap, ASEAN NCAP shall also focus on 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. ASEAN NCAP believes that AEB is an important technology, which has been well-received by most car manufacturers. In North America, 22 automakers have agreed to voluntarily fit their cars with standard AEB starting in 2022. ASEAN NCAP shall, in addition, place greater attention on AEB City and Inter Urban. As for AEB Pedestrian, ASEAN NCAP plans to delay its introduction until sufficient data is available from various studies. Based on initial results, it is believed that AEB Pedestrian might not be able to reduce the number of pedestrian fatalities especially in lower-income countries such as Myanmar, Laos and Cambodia. Nevertheless, points will not be deducted if car manufacturers are to install this technology in their cars.

Also, in Safety Assist, ASEAN NCAP shall pay close attention to the rear occupant detection. Hence in the new roadmap, a total of 50 percent shall be rewarded for Seatbelt Reminder (SBR) Rear Occupant Detection. Such a decision also provides evidence that ASEAN NCAP will be focusing on the use of seatbelts as the primary protection for car occupants.

Finally, ASEAN NCAP shall be rewarding another 3 points under Safety Assist for Advance SAT with OEMs being able to select any technology that is suitable to reduce road casualties. In this area, car manufacturers are encouraged to introduce a technology that will benefit road users and help prevent a road crash.

❖ ***Motorcyclist Safety***

ASEAN NCAP remains totally committed to ensure the safety of motorcyclists in Southeast Asia. It is a known fact that motorcyclists make up the biggest group and represent 80 percent of the total number of road users in ASEAN countries. Unfortunately, the region has also witnessed a tremendous increment in terms of motorcyclist fatalities, hence the issue of powered two-wheelers safety must not be overlooked. As such, ASEAN NCAP will be putting motorcyclist safety at the forefront of its road safety agenda.

➤ **Blind Spot Detection and Blind Spot Visualization**

Among the main technology in this pillar is Blind Spot Detection (BSD) and Blind Spot Visualization (BSV). Both BSD and BSV will help in providing early detection/image to avoid collision with motorcycle. It is expected that 37 percent of the collision can be avoided if all cars are equipped with such a technology. Although BSD technology was first launched in the 1980s, its capability to detect small vehicle is yet to be fully optimized. In view of this situation, ASEAN NCAP plans to take the lead by implementing the use of BSD to increase car safety. Admittedly, BSD and BSV may have their strong and weak points. For instance, BSD will not be able to detect the presence of another vehicle at certain speed but this is where BSV comes into play. Yet, the use of BSV shall require the driver to assume a more active role.

➤ **Advanced Rear Visualization**

ASEAN NCAP is also of the opinion that collision with motorcyclists can be avoided if a car driver is more alert of his surroundings within a 30-meter radius. Hence, Advanced Rear Visualization will come in handy for the purpose of determining the presence of motorcycles and other small vehicles. Currently, with the increasing popularity of MPVs and SUVs in ASEAN countries, it has become a norm to see large families travelling together in a car with their luggage packed to the brim. In such a situation, use of the rear view mirror will not be helpful as the driver's view is blocked by the rear passengers. Such a scenario can be avoided with the use of Advanced Rear Visualization which will aid and improve the driver's view, as a tiny camera is placed at the rear end (in addition to the rear mirror) of the car.

➤ **Auto High Beam**

Widespread popularity of the motorcycle presents a totally different problem compared to the car. 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 are not in working order. For example, the headlight or the tail light might not work. Such an issue pertaining to conspicuousness of motorcyclists will definitely result in a dangerous situation; which could eventually lead to road crashes. This stems from the difficulty faced by car drivers to notice the presence of nearby motorcyclists. Regardless, with the Auto High Beam function in a new car, this problem may reach a solution and in turn may result in a reduction of motorcyclist fatality in the ASEAN region.

➤ **Pedestrian Protection**

The issue of pedestrian safety may not be too worrying in ASEAN countries. Regardless, ASEAN NCAP believes it is still important to lend support to the existing initiatives introduced by several car manufacturers pertaining to pedestrian protection. Of late, new cars have been designed with the concept of protecting pedestrians. Taking cue from this, ASEAN NCAP wishes to also include Pedestrian Protection in this new roadmap. Because pedestrian falls under the Vulnerable Road User category, ASEAN NCAP feels that Pedestrian Protection must be regarded as part of the Motorcyclist Safety segment.

➤ **Advanced Motorcyclist Safety Technology**

All in all, current technologies fitted in a car that could increase motorcyclist safety have been few and far between. Thus, as a means to further encourage the use of such inventions, ASEAN NCAP wishes to reward an additional 2 points for any two technologies that could help reduce the possibility of a collision between the car and motorcycle. Regardless, the 2 points will not be added to the main pillar but rather acts as a bonus point, whereby it will not exceed the full score under Motorcyclist Safety.

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 the NCAP assessment. As ASEAN NCAP has moved to a single rating scheme, consumers can simply refer to the safety star rating which comprises the accumulated score based on the four main assessment pillars under the new protocol for 2021-2025 that are AOP, COP, SAT and MS.



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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