



28TH ASEAN TRANSPORT MINISTERS MEETING MEMORANDUM

Introduction

1. Globally, over 1.35 million people lose their lives to road traffic crashes and millions more are seriously injured. Locally in the ASEAN¹ region, countries contributed nearly 30% to the global road crash fatalities with a mortality rate of more than 18.4 per 100,000 population despite being only 8.5% of the global population.
2. Riders of powered two and three wheelers account for the majority of the road fatalities in the region and a key contributor to this is the high concentration of motorcycles in most ASEAN countries. Motorcycles are the most popular mode of transport in ASEAN countries, where motorization is rapidly growing. In several Asian cities, the average number of motorcycles is seven times the global average²
3. Globally, powered two and three wheelers represent 29% of all deaths but alarmingly, in ASEAN, more than half of all road fatalities were related to motorcycle usage. In some countries in the region such as Cambodia and Indonesia, rider fatalities can be as high as 74%³.

| Country | WHO estimated deaths | WHO estimated death per 100K | Population | % death from powered 2/3 wheelers |
|----------------------------------|----------------------|------------------------------|-------------|-----------------------------------|
| Brunei | N/A | N/A | N/A | N/A |
| Cambodia | 2803 | 17.8 | 15,762,370 | 73% |
| Indonesia | 31726 | 12.2 | 261,115,456 | 74% |
| Lao People's Democratic Republic | 1120 | 16.6 | 6,758,353 | N/A |
| Malaysia | 7374 | 23.6 | 31,187,264 | N/A |
| Myanmar | 10540 | 19.9 | 52,885,224 | 65% |
| Philippines | 12690 | 12.3 | 103,320,224 | 5%* |
| Singapore | 155 | 2.8 | 5,622,455 | 44% |
| Thailand | 22,491 | 32.7 | 68,863,512 | 74% |
| Vietnam | 24,970 | 26.4 | 94,569,073 | N/A |

Table 1. Road fatality profile of countries in ASEAN region

*94% of road fatalities by road user category were listed as unknown

4. Road trauma is a predictable and preventable humanitarian crisis. In addition to the tragic loss of lives and health, it also results in huge social and economic losses that

¹ ASEAN region or countries refers to Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam only

² Metin Senbil, J. Z. (2007). Motorization in Asia: 14 Countries and three metropolitan areas. IATSS Research, 31(1), 46-58.

³ World Health Organisation. (2018). Global Status Report on Road Safety 2018.

could be significantly reduced across ASEAN countries. According to the World Bank, on average a 10% reduction in road traffic deaths raises per capita real GDP by 3.6% over a 24-year horizon⁴. For too long, however, road injury prevention has been overlooked as an issue of sustainable development.

Global Mandate for Reducing Road Deaths and Injuries

5. Fortunately, this has recently changed as road safety is now recognised as a major issue of public health and sustainable development. Significantly, road injury prevention has been included in the United Nations (UN) 2030 Agenda for Sustainable Development (Agenda 2030)⁵. The Sustainable Development Goals (SDGs) for ‘Good Health and Well Being’ and for ‘Sustainable Cities and Communities’ both refer to road safety and have specific targets for road injury prevention (targets 3.6 & 11.2)⁶. In 2020, The 3rd Global Ministerial Conference on Road Safety was held in February. The key takeaway was the adoption of the Stockholm Declaration which included a target to halve road deaths and injuries by 50% by 2030. Following this, in August 2020, the UN General Assembly adopted a new resolution on ‘Improving Global Road Safety’. The resolution *‘proclaims the period 2021-2030 as the Second Decade of Action for Road Safety, with a goal of reducing road traffic deaths and injuries by at least 50 per cent from 2021 to 2030...’*⁷
6. These declarations represent the strongest ever global mandate for action to reduce the number of people being killed and seriously injured on the world’s roads. Countries and governments are encouraged to address the negative health impact that road trauma has on its citizens and to implement effective road safety solutions to help meet this target.
7. However, it would be very difficult for ASEAN countries to achieve the goal of a 50% reduction in road deaths and injuries unless the specific challenges of motorcycle safety are addressed.

Global Plan for Road Safety

8. To inspire greater actions amongst governments and stakeholders to help meet the 2030 target, a new Global Plan⁸ has been launched by the World Health Organisation (WHO) and United Nations (UN) Regional Commissions and UN Road Safety Collaboration stakeholders. The Global Plan describes what is needed to help achieve the target and calls on governments and partners to implement an integrated Safe System approach to road trauma reduction. One of the key elements of the Safe

⁴ <https://www.worldbank.org/en/news/press-release/2018/01/09/road-deaths-and-injuries-hold-back-economic-growth-in-developing-countries>

⁵ <https://sdgs.un.org/2030agenda>

⁶ <https://sustainabledevelopment.un.org/post2015/transformingourworld>

⁷ United Nations General Assembly Resolution A/RES/74/299, 31 August 2020

⁸ <https://www.who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030>

System approach is improved vehicle safety to help reduce trauma. The Global Plan includes key recommendations on vehicle safety (pages 13 & 14), including ones specifically for improving motorcycle safety.

9. In June 2022, a High-level Meeting of the UN General Assembly on Global Road Safety was held under the overall theme “*The 2030 horizon for road safety: securing a decade of action and delivery*”. The High Level Meeting adopted a political declaration which endorsed and committed to drive the implementation of the Global Plan.
10. In addition, in April 2018, the UN General Assembly endorsed 12 road safety performance targets for implementation by 2030⁹ to assist countries to measure their road safety performance. Target 5 sets an ambitious goal of: *By 2030, 100% of new (defined as produced, sold or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN regulations, Global Technical Regulations, or equivalent recognized national performance requirements*. One of these priority regulations is UN Regulation 78/ UN Global Technical Regulation (GTR) 3 for Motorcycle ABS.

| | |
|-----------------|------------------------------|
| Reg. 14 | Seat belt anchorages |
| Reg. 16 | Safety belts & restraints |
| Reg. 94 | Frontal collision |
| Reg. 95 | Lateral collision |
| Reg.140 (GTR 8) | Electronic stability control |
| Reg.127 (GTR 9) | Pedestrian protection |
| Reg. 44/129 | Child restraints |
| Reg. 78 (GTR 3) | Motorcycle ABS |

*or equivalent national standards
 **GTR = Global Technical Regulation

Table 2 - Recommended Priority United Nations (UN) Vehicle Safety Standards

Motorcycle ABS – Regulation & Consumer Demand

11. Motorcyclists are vulnerable due to the lack of protection as compared to car occupants. Due to this lack of protection, it is vital to focus efforts on crash avoidance technologies in order to increase motorcyclist safety. One of the most effective motorcycle safety technologies available to date is motorcycle anti-lock braking system (ABS). Research has shown that motorcycle ABS can increase rider stability, reduce stopping distances and decrease rider fatalities by 31%¹⁰.

⁹ https://www.who.int/violence_injury_prevention/road_traffic/12GlobalRoadSafetyTargets.pdf

¹⁰ Rizzi, M., Strandroth, J., Kullgren, A., Tingvall, C., & Fildes, B. (2015). *Effectiveness of Motorcycle Antilock Braking Systems (ABS) in Reducing Crashes, the First Cross-National*, Traffic Injury Prevention 16, 177–183.

12. To increase motorcyclist safety, there is an urgent need to democratise safety globally through the application of a motorcycle ABS standard. Every motorcycle sold that is not equipped with ABS is an opportunity lost.
13. The safety of a vehicle can be a function of the vehicle safety regulations of the producing country. While the UN World Forum for Harmonisation of Vehicle Regulations (WP.29) provides a legal framework for a range of vehicle safety standards for UN member states to adopt voluntarily, many countries do not. The lack of universal adoption of the minimum standards creates a loophole in which manufacturers can produce and sell sub standard vehicles in countries that have not applied the standards, typically in low and middle income countries.

| | UN Vehicle Standards | | | | | | | |
|----------------------------------|----------------------|-------------------------|--------------------|-----------------|---|----------------------------------|---------------------|-------------------------|
| | Seatbelts R16 | Seatbelt anchorages R14 | Frontal Impact R94 | Side Impact R95 | Electronic Stability Control R140/GTR 8 | Pedestrian Protection R127/GTR 9 | Child Seats R44/129 | Motorcycle ABS R78/GTR3 |
| Brunei | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Cambodia | - | - | - | - | - | - | - | - |
| Indonesia | - | - | - | - | - | - | - | - |
| Lao People's Democratic Republic | - | - | - | - | - | - | - | - |
| Malaysia | Y | Y | Y | Y | Y | Y | Y | Y |
| Myanmar | - | - | - | - | - | - | - | - |
| Philippines | - | - | - | - | - | - | Y | - |
| Singapore | - | - | - | - | - | - | - | - |
| Timor-Leste | - | - | - | - | - | - | - | - |
| Thailand | Y | Y | - | - | - | Y | - | Y |
| Vietnam | - | - | - | - | - | - | - | - |

Table 3 – Status of priority UN vehicle regulations in ASEAN countries ^{1,2}

14. UN Resolution 74/299⁷ reaffirmed the role and importance vehicle regulations have in facilitating road safety and invites Member States to implement UN vehicle regulations or equivalent national standards to ensure all new motor vehicles meet applicable minimum regulations and for active safety systems to be fitted as standard equipment. Furthermore, UNESCAP recommends its member countries to adopt the

priority UN vehicle safety standards through integrating with their national vehicle safety standards¹¹.

15. The implementation of motorcycle ABS is already mandated in many countries globally such as Europe, India, Japan, China, South Korea, Australia, and New Zealand.
16. Despite the availability and effectiveness of motorcycle ABS, penetration of the technology (and other vehicle safety regulations) in ASEAN has been low due to the absence of government legislation and consumer awareness. Currently, Thailand and Malaysia are the only countries to mandate for motorcycle ABS to accelerate its uptake. An opportunity exists for more activities to facilitate greater consumer awareness and encouragement of governments in other ASEAN countries to mandate the technology (UN Regulation 78/GTR 3)
17. There is also great consumer demand for motorcycle ABS. A recent survey conducted by the Malaysian Institute of Road Safety Research (MIROS)¹² in ASEAN found 75% of respondents believe all motorcycles should be fitted with ABS. Furthermore, almost 80% of respondents were supportive of a motorcycle ABS regulation to be introduced across ASEAN, with most supportive of the regulation being implemented immediately or within the next five years.

Small Engine Capacity Motorcycle & Motorcycle ABS

18. There are a lot of motorcycle variations but the most popular type in the ASEAN region is the small-engine capacity (less than 250cc). Statistics indicate that these motorcycle types dominate the market in most ASEAN countries, with over 80% of the market in Thailand and over 90% in Malaysia¹³
19. There are two types of motorcycles on the ASEAN market- ABS-equipped motorcycles and non-ABS motorcycles. Most big engine motorcycles (250cc and over) come with ABS equipped, however, only a few smaller engine motorcycles (below 250cc) are fitted with ABS. It is estimated that the proportion of new motorcycles with ABS sold in the ASEAN region vary between 1 – 5%.
20. According to the regional motorcycle market, the majority of buyers can only afford the smaller engine motorcycles due to the price. Hence, motorcyclists in this category make up 90% of the total number of motorcycle users in Malaysia, 80% in Thailand and 90% in Indonesia.
21. Therefore, it is important to ensure any regulation for motorcycle ABS should also cover motorcycles of a smaller capacity. One effective way to do this is to stipulate ABS for any powered two wheelers that are capable of travel speeds of 50km/h or greater.

¹¹ <https://www.unescap.org/announcement/road-safety-status-asia-pacific-region>

¹² MIROS (2022). ASEAN Motorcycle ABS Status Report.

¹³ WHO (2020). Motorcycle ABS To Save Lives. New Delhi: World Health Organization, Regional Office For South-East Asia; 2020.

Licence: Cc By-Nc-Sa 3.0 Igo; Abdul Manan, M. M., Ho, J.S., Syed Tajul Malik, S.T.A., M. Ruhaizat , G. (2016), Speed Study And Behavior Observation Of Motorcyclist Along Malaysian Roads , MIROS Research Report Mrrxx /2016, MIROS, Kuala Lumpur.

Number of Lives That Can Be Saved

22. The life saving potential of motorcycle ABS is huge. In Thailand, the use of motorcycle ABS is estimated to be able to save nearly 6,000 to 9,000 lives in the 5 years after the ABS regulation is implemented
- 23. In ASEAN, the implementation of an ABS motorcycle regulation in the region is likely to be able to save the lives of up to 8,000 motorcyclists every year.**
24. It would, therefore, be a powerful demonstration of commitment to road injury prevention if the ASEAN Transport Ministers **were to endorse a region wide mandate to regulate for motorcycle ABS for all powered two wheelers that are capable of travel speeds of 50km/h or greater** in a bid to reduce the high burden of motorcycle fatalities and injuries in the region.

Conclusion

25. The ASEAN Transport Ministers have a great opportunity to reduce road deaths and serious injuries among its member countries and also play a leading role in global road safety with the new Decade of Action and 2030 target. There is significant scope for improvement in vehicle safety in the ASEAN region and countries are encouraged to systematically implement the recommendations of the Global Plan. Due to the high rate of motorcycle fatalities in the region, ASEAN Transport Ministers are especially encouraged to **endorse a region wide mandate to regulate for motorcycle ABS for all powered two wheelers that are capable of travel speeds of 50km/h or greater.**



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