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EDITORIAL

Where is Malaysia at the End of the Decade of Action for Road Safety 2011-2020?

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1. Background

The year 2020 is the last year of Decade of Action for Road Safety 2011-2020 which was first proclaimed in March 2010 at the United Nation General Assembly with a goal of stabilizing and subsequently reducing the forecasted level of road traffic fatalities around the world by increasing activities conducted at national, regional and global levels (WHO, 2010). In general, this plan used the safe system approach where the responsibility from road users was shifted to the road transport system designers. The plan also emphasizes on activities to be focused on five main pillars which are road safety management, safer roads, safer vehicles, safer road user and post-crash management.

Locally, the Road Safety Plan of Malaysia 2014 – 2020 (RSPM) was launched at the end of 2013, which was also aligned with the global plan. The local plan has set the target to halve the predicted number of road traffic death by the year 2020 from 10,716 to 5,358. In achieving this target, it is supported by six (6) final outcomes and ten midterm outcomes and also 34 recommended programs (JKJR, 2014).

The used of absolute number as a target is in contrast with the first plan the Road Safety Plan of Malaysia 2006-2010 that used three indexes as the target to be achieved. Malaysia has failed to meet these targets by 2010, and these indexes are more suitable to be used as a performance comparison between countries.

2. Current Status

At the end of the last decade in 2010, the population in Malaysia was 28,081,500 and increased to 32,600,000 in 2019 with an average growth rate of 1.5%. While in the same period, the number of registered vehicles increased by 56% from 20,006,953 to 31,214,842 vehicles in 2019. Though with the increase in this number, however, the composition remains the same where half are motorcycle (JPJ, 2019).

Meanwhile, cases for road traffic crashes as reported by the Royal Malaysian Police (PDRM) in 2019 continued to show an upward trend from the end of the past decade from 414,421 to 567,516 cases or 37% of increment. In contrast to the upward trend for road traffic crashes, road traffic deaths started to have declined in the number since the year 2017 through the first half of the decade observed an upward trend where it hit the highest spike in 2016 with 7,152 deaths. The deaths due to road traffic crashes in 2019 were 6,167, and this is 10.3% lower as compared to 2009 with 6,282 deaths.

Motorcyclist is still the most dominant user group that died due to road traffic crashes throughout this period. About 58.7% or 4,036 of road deaths in 2010 were among the motorcyclist while 62.4% or

3,959 in the year 2019. The pattern remains the same in this decade where car occupants and pedestrians are the next two riskier user groups to die on Malaysian roads.

All in all, for the ten years there were 4,940,345 road traffic crashes resulted in 67,304 deaths and the total cost loss to the nation was about RM87.5 billion. In the same period, the overall motorcycle deaths are very alarming, with 41,979 or 62.3%.

Theoretically, road traffic crash results from a combination of factors related to the components of the system comprising roads, the environment, vehicles and road users, and the interaction of these three components (WHO, 2006). Data from PDRM for the year 2018 shows that the leading cause of crashes was out of control (36%) from a single-vehicle incident. While an in-depth crash investigation carried out between 2011 to 2013 has identified risky driving and speeding as the highest contributing crash occurrence factor while for injury occurrence factor, crash compatibility was the most identified factor (Siti Atiqah et al., 2017).

3. Important Milestones

Nevertheless, within this decade, new road safety policies, programs and interventions were introduced. One of the crucial achievements is the dedicated plan for road safety, as mentioned earlier. In 2017, the Malaysian Institute of Road Safety Research (MIROS) was tasked by the Ministry of Transport Malaysia (MOT) to report on the status quo of the implementation of the said plan. In general, all 34 programs listed in the plan were carried out except for one program, which is community service for traffic offenders. (Sharifah Allyana et al., 2018). Although this, all 33 programs are at a different phase of implementation and also it is essential to note that there was a lack of monitoring mechanism to ensure the effectiveness of the executed programs.

Aside than this, one critical feedback from all the stakeholders was unfortunately, the allocation for road safety program usually allocated under other more significant or major programs. From this study, it is also noted that the obvious and vital gap is the absence of indicators and goals set for each program in this plan. In addition, a monitoring committee needs to be established to ensure that the proposed remedial measures are implemented effectively.

Another remarkable milestone is the implementation of the Automated Enforcement System in 2012, which was later renamed as Automated Awareness Safety System (AwAS) in 2017. The cameras placement was based on national historical crashes information and focused explicitly on speeding, and red-light running crashes. Although the program started with only 14 cameras and subsequently increased to 45 cameras, the positive impact towards the behavior of traffic users and crash occurrence was observed. The compliance to

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the posted speed limit increased nearly two-fold to 96% while the violation rate near AwAS red-light camera reduces to 3.8% after about four (4) years implementation (Sharifah Allyana et al., 2014; Hawa et al., 2018).

Parallel with the renamed of AwAS, the new demerit system for traffic offender was also introduced. The system called KEJARA is a procedure for giving demerit points to motor vehicles drivers who commit scheduled offences under the Road Transport Act 1987 and Rules thereunder. Currently, there are 23 scheduled offences under the Road Transport Rules (Demerit Points) 2017, and some of the offences include driving under the influence of alcohol or drugs, failed to follow traffic light and driving over the speed limit. Any drivers that are guilty of an offence and obtained first 40 points, the driver's license will be suspended for six (6) to eight (8) months (JPJ, 2017).

The new Driver Education Curriculum (KPP) has been improved based on Bloom's Taxonomy and came into effect in 2014. These improvements include psychomotor competency and cognitive competency that could nurture the public's awareness and understanding rather than only to equip the targeted group with new information (Roziana et al., 2016). Findings show that there were positive effects of the exposure to the new KPP among new drivers as compare to previous KPP group where learning and improving in hazard perception skill at a quicker rate (Mohd Khairul Alhapiz et al., 2016).

New Car Assessment Program for Southeast Asian Countries (ASEAN NCAP) marked a new milestone of vehicle safety for the region in response to the United Nations' Decade of Action for Road Safety 2011 – 2020. The establishment of ASEAN NCAP in December 2011 with the target to elevate vehicle safety standards, raise consumer awareness and thus encourage a market for safer vehicles in the region. In the first and second phases of ASEAN NCAP test, two (2) separate assessments conducted in the rating scheme, which is Adult Occupant Protection (AOP) by star-rating and Child Occupant Protection (COP) by percentage-based rating. For the third phase, which began in 2013, ASEAN Electronic Stability Control (ESC) and Seatbelt Reminder System (SBR) for both driver and passenger were set as a pre-requisite requirement in addition to the side impact (UN R95).

Between 2017 to 2020, ASEAN NCAP has developed a single rating system by combining three (3) safety domains inclusive of the safety assist technology, which previously only act as a pre-requisite to obtain a 5-Star AOP rating (Khairil Anwar et al., 2018). In addition to this, new ASEAN NCAP labelling compliance guideline for Malaysia was launched in 2019 with the aims to guide related parties who are involved in the sale of passenger vehicles in Malaysia besides to provide information to vehicle consumers on the safety level of the car. Acknowledging, the high number of motorcycle crashes not only in Malaysia but also in the ASEAN region; the upcoming 2021 – 2025 roadmap, ASEAN NCAP has created a new pillar called motorcyclist safety pillar; dedicated to assessing the safety performance of the car to avoid collision with motorcycles.

ISO39001 is a global standard that sets minimum requirements for a road traffic safety (RTS) management system, to help prevent and reduce the risk of road-related death and serious injury. As a pioneer in the development of this standard document, Malaysia has taken the initiative by implementing this standard at four (4) organizations from various industries in 2012.

In the effort to reduce the number of commuting crashes Social Security Organization (SOCSO) Malaysia in cooperation with the Malaysian Institute of Road Safety Research (MIROS) launched the Commuting Safety Support Program (CSSP) in 2017. Within the three (3) years period and till the end of 2019 there were 185 employers had joined the program. The program aims to facilitate employers' implementation of commuting safety measures at the workplace through practical intervention in order to reduce the number of motorcyclist accidents. It also encourages close cooperation between strategic partners and stakeholders for better road safety. There are six (6) main modules which are defensive riding training, commuting safety talk, fitness to ride, family safety reminder, motorcycle daily

inspection and route hazard mapping. Positive findings including 81% reduction in the number of crashes among employers on the first year after attending the CSSP.

Realizing the national-level program might not suit all situation, a localized intervention introduced by the Road Safety Department (JKJR) called My Safe Road Program in 2016 focusing on high-risk districts and blackspot areas. The first pilot project for My Safe Road Program was in Batu Pahat. Batu Pahat has a history of district with highest road deaths not only in Johor but in Malaysia. In about three (3) years of the program, some exceptional achievement that could be highlight was the close collaboration of localized road safety stakeholder. Study shows that vehicle speed reduction was observed upon the improvement of road facilities which includes U-turn, median, warning signboards and high quality of road marking at the blackspot locations (JKJR, 2018).

Nevertheless, there were also a few significant programs that started in the previous decade but continue in the current decade. Such program is International Road Assessment Program (iRAP) which started in Malaysia in 2007 as a pilot project with a strong partnership between Automobile Association Malaysia (AAM), JKJR, MIROS, Australian Automobile Association (AAA) and the ARRB Group. iRAP targets high-risk roads where a large number of road users are killed or seriously injured, and inspects them to identify targeted high impact and affordable safety engineering countermeasures that can reduce large numbers of deaths and serious injuries. The iRAP inspections in 2007 covered approximately 3,700 kilometres of roads, representing approximately 6% of Malaysia's paved roads. The inspected roads include expressways and federal roads in Peninsular Malaysia.

In a recent development, iRAP continues to collaborate with private sector partnership in 2016 which able to expand the road assessment to cover a more prominent road network was paramount in achieving the target set by the MOT to ensure 75% of the travel occurs on at least 3-star roads. Within this decade, the establishment of iRAP steering committee shows significant impact whereby result from the survey was implemented by road authority. Hence, road assessment, road improvement, communication, and research and development are seen to be vital for a sustainable iRAP program in generating high impact outcomes in the long term (Alvin Poi et al., 2018).

Another program, called Road Safety Education, also started as a pilot phase in 2005 and was fully implemented in 2011. To ease the implementation of this program, JKJR works closely with the Ministry of Education and the implementation of this program is by an insertion in the Malay Language subject in school. In 2016, module development for kindergarten started, and module review for primary school was carried out. Meanwhile, module review for secondary school was conducted in 2018 and among the contents of the new module include an introduction to helmet, speed, seat belts, risk reduction for riders and pedestrians, light reflector and airbag.

Besides than the said programs, among other new and continuity initiatives from the previous decade were:

- Motorcycle Lane
- · Community-Based Program
- United Nations Rules for Vehicle Type Approval
- Road Safety Audit

Unfortunately, with all these programs, in 2013 Malaysia was awakened by a horrific fatal crash involving a bus that plunged at Genting Highlands claimed 37 lives and 16 others were seriously injured. Subsequent to this MOT has established an Independent Advisory Panel that comes out with a final report with 51 recommendations for improvement. A follow up of this report in 2018 found that 27 and 19 recommendations were fully and partially implemented respectively.

4. Way Forward

Moving to the new decade, Malaysia has made another progress by enforcing the child restraint law on 1 January 2020 with soft landing

approach where the first six (6) months are dedicated for educating and raising public awareness on this new law, and no summonses were issued during the period.

Currently, in the first quarter of 2020, it is foreseen that the local target might not be achieved and globally the Stockholm Declaration also has recognized that the Sustainable Development Goal target 3.6 will not be met by 2020 and suggested that significant progress can only be achieved through stronger political will, the implementation of evidence-based strategies and engagement with all relevant actors including the private sector, as well as additional innovative approaches.

In Malaysia context, one of the essential gaps to be improved is the sole dependence on government funding source besides than the fragmentation of the process for decision making due to the multidisciplinary area of road safety (Zarulazam & Evdorides, 2017).

Similar to the rest of the world, the evolution of road safety methods in Malaysia shifted from the five (5) E's – Engineering, Enforcement, Education, Environment and Evaluation where later Malaysia also adopted the five (5) pillar of road safety based on the Decade on Action 2011 – 2020. Moving forward, aligned with the recent 3rd Global Ministerial Conference on Road Safety, Malaysia also should establish the target of 50% reduction in road deaths and serious injuries by the end of the next decade and further strengthening the adoption of safe system approach. Successful and high impact programs from the current decade should continue with further engagement of the public and private sectors and civil society in road safety programs.

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