

**In the spotlight:**  
The AES has received mixed reactions over its effectiveness.



# The lowdown on the AES

The AES may not be the only solution to reducing road accidents but it can be an effective initiative in the long run.



**Dr Radin Umar:** AES offers a 24-7 enforcement opportunity, provided it is set up properly and there is good acceptance by all.



It was supposed to be the solution for many of Malaysia's road safety woes, but the Automated Enforcement System (AES) has instead drawn mixed reactions. The latest was the Selangor state government's decision to block the installation and implementation of the system until an independent valuator reviewed if the Transport Ministry has "holistically" considered all necessary procedures.

Transport expert and Universiti Putra Malaysia vice-chancellor Datuk Dr Radin Umar Radin Sohaiddi, who came up with the AES concept when he was heading the Malaysian Institute of Road Safety Research (Miros), shares his views on the automated system.

**> Is the AES really the way to go to bring down road accidents and fatalities?**

It is one of the proven ways to tackle speed-related crashes and red light-running crashes in any country. In Malaysia, we have about 1,500 deaths, 5,000 serious injuries, 12,000 slight injuries, (and) around 50,000 damage-only crashes related to speed and running red lights every year on our roads. Many are just victims like you and me.

**> What are the pros and cons of the AES?**

AES offers a 24-7 enforcement opportunity, provided it is set up properly and there is good acceptance by all. At the same time, it eliminates discretion and corruption. It has the potential of reducing about 30% to 40% of speed-related and red light-running "Killed and Seriously Injured" (KSI) cases (around 2000 less KSI) per year. The key success factor is in the details, particularly on parameter settings and engagement with the

**Eye on offenders:** AES cameras can help capture errant motorists.



public. The public should look at it from the public safety point of view rather than revenue generation.

**> Is there an alternative and different system that is comparable and just as effective? If so – what and how does it work?**

Traffic calming like speed control devices such as humps, rumble strips, speed tables, super elevations, and delineation have also been used. However, they are only appropriate under certain conditions. In addressing speed-related and red light-running cases, the AES would be the best option.

**> Why do you think there is so much objection and resistance on the AES if the objective is to save lives and that those who do not commit traffic offences do not need to pay?**

First, it has been politicised and the general election is coming near. Second, the parameter settings were not done properly.

Third, the public have not been properly informed. Fourth, there have been many spinners with the

wrong knowledge and information, for example that AES is *saman ekor* – which is not the case. Fifth, it is perceived as being subcontracted to a private company. Somehow, it is not promoted as a life-saving initiative. Hence, there is a need to get it right.

**> How surprised are you at the resistance to the AES?**

Not surprised. This is the normal cycle and has also been experienced by other countries.

**> What should or could be done to gain public confidence and acceptance of the AES?**

Site verification must be carried out. What is on the map must be on the ground. Collision mechanisms and road user movements (RUM) must be attributable to speed-related and red light-running crashes. We need the RUM and collision diagrams to verify this.

Parameter settings must be carried out. Among the parameter settings for red light cameras are phasing, timing, inter green, dilemma zones, viability, layout configura-

tions, lane balance, trapped lanes and others. All of these must be properly set first, before the camera is installed. This is to ensure that red-light running is not due to poor design of the intersection. For example, we can't blame the road user for beating the traffic light due to frustration (waiting for more than three cycles of red light).

For speed cameras, the parameter setting would be speed consistency within a 5km section, speed change, approach speed, 85th percentile speed, and design speed, among others. If more than 15% are caught overspeeding, it indicates that the posted speeds are not appropriate. Signage is important, too. Finally, outcomes of the AES in saving lives must be communicated.

**> What is the best way to reduce accidents, fatalities and mishaps?**

Many interventions but each one depends on the (individual) crash characteristics.

**> Would harsher penalties help?**

Yes, for drivers abusing the system and endangering others.

**> People complain that the roads are bad, narrow and full of potholes; there are not enough motorbike lanes; people double-park everywhere; some reverse their cars even on a highway; they talk on the mobile phone or SMS while driving. They say the AES won't make a difference because it is NOT a holistic approach to addressing the problem because poor roads and bad driving remains. What is your comment?**

Yes, we are implementing comprehensive interventions. The AES is just one of the high-impact interventions.

**> Generally, how would you**

**describe Malaysian drivers?**

I think we are still producing incompetent and unsafe drivers on the road. We need to improve our driver training, educate children in school (on road safety) and educate errant users via enforcement.

**> What do you think of calls for the speed limits to be reviewed upwards, on the grounds that the speed limits were set years ago and that cars and highways are much better these days?**

We will kill more people on our roads. Crazy idea.

**> Why was the AES privatised? People think that the Government should be the one to buy and enforce the system. Why not buy the equipment but pay a service contractor to maintain the system?**

It is not privatisation but rather PPP (public-private partnership). The process owner is still JPJ (Road Transport Department). Instead of JPJ buying, installing, and managing the equipment, it is outsourced to a private company. The company is supposed to install, maintain and help process the summons for JPJ, but JPJ will still be responsible for the whole process. The company is just handling part of the process.

The current model is to buy the equipment (with money from the government) to operate and maintain. That's business as usual and the detection rate is low. Hence, abuse is high. The issue is not this. The issue is the missed detection of offenders, hence killing many. So, why must we protect the offenders? Having said that, however, the parameter settings must be right, as I have said earlier.

*> This interview was conducted before the Selangor state government announced its decision to block the implementation of the AES.*