

CHAPTER 21: AUTOMATED LAW ENFORCEMENT

21.1 INTRODUCTION

- 1 The intention behind traffic law enforcement is to enhance the level of safety experienced by road users. Automated law enforcement can be used to supplement the law enforcement programme of a road authority.
- 2 The technology exists to capture an image in digital format and transmit it to a central computer. The identification of the erring vehicle can be identified by a technique such as number plate recognition. It is also possible to automate the dispatching of legal notices to owners of vehicles.
- 3 Many violations cannot easily be detected by automated detection techniques. These include roadworthiness, alcohol limits, reckless driving, frequent lane changing, etc. Some violations, however, can be detected automatically and some of these can be incorporated as part of the traffic signal system.
- 4 Unfortunately, the very ease with which automated law enforcement can be applied, may tempt traffic officials to abuse or overuse the system and bring it into disrepute, particularly when the automated law enforcement is unbalanced in relation to other, non-automated, law enforcement efforts.

21.2 VIOLATIONS AT TRAFFIC SIGNALS

- 1 Violations at junctions include:
 - (a) Turning from the wrong lane, or changing lanes in the junction area.
 - (b) Entering the junction when it is not possible to clear the junction area.
 - (c) Travelling at high speed through the junction.
 - (d) Entering the junction in the face of a red light signal.
- 2 Most automated law enforcement systems are installed for the detection of the last-mentioned violation, namely red light running. This violation is a major problem and is probably one of the major causes of serious accidents at traffic signals.
- 3 It is also possible to install automated law enforcement to detect speeding offences. Excessive speeding at signalised junctions could be dangerous, perhaps more so than on the street sections between the junctions. Red light running and speed enforcement can be combined in the same set of equipment.
- 4 The other violations are more difficult to detect using automatic detection systems.

21.3 IMPLEMENTATION

- 1 The development and maintenance of standards for all equipment used for law enforcement in South Africa is the responsibility of the Technical Committee for Standards and Procedures for Law Enforcement. This committee operates under the auspices of the South African National Departments of Transport and Justice.
- 2 Equipment used for automated law enforcement must comply with an appropriate South African Bureau of Standards specification. Information on available specifications can be obtained from the South African Bureau of Standards. The following are a number of examples of standards that are available:
 - (a) South African standard specification SANS 1795-0: *Speed measuring equipment Part 0: General*. Specify mechanical, electrical and operation requirements for speed measuring equipment that is intended for traffic law enforcement and prosecution purposes.
 - (b) South African standard specification SANS 1795-3: *Speed measuring equipment Part 3: Distance-over-time measuring equipment (fixed distance/variable time)*. Specifications that measure speed over a fixed distance.
- 3 The committee also issues prosecution guidelines that should be adhered to in law enforcement actions. Failure to comply with these guidelines could result in the withdrawal of cases.
- 4 The SABS specifications and prosecution guidelines address issues such as the position and type of equipment, and the data required to ensure successful prosecution. For red light running violations, for instance, the photograph of the vehicle must clearly show the position of the vehicle in relation to the stop line, as well as the red light signal. The date and time of the incident should also be captured by the equipment.

