

# Road Safety Guidelines

*for the Asian and Pacific Region*

# 4.10

## **TRAFFIC LEGISLATION**



Asian Development Bank

# TRAFFIC LEGISLATION

Traffic legislation regulates the use of public roads and is applicable to the circulation of people, animals, and vehicles on the public highway and related activities. Where possible within the legislative system, the primary legislation should provide the basic features and framework, and the details should be specified within secondary legislation (i.e., through ministerial regulations). This allows flexibility for periodic revision without disturbing the primary enactment. Legislation provides the framework to promote and, where necessary, to enforce safer road user behavior.

Legislation specific to road safety includes as follows:

- driver licensing (criteria for license holders and driving test content);
- vehicle registration and testing (roadworthiness requirements and testing, and registration);
- control of traffic (speed limits, traffic signals, signs and markings, drink-driving, and pedestrians); and
- road authority.

Fixed penalty and penalty point systems should be considered wherever feasible as these have been found to be effective in reducing administration and influencing driver behavior in many industrialized countries. However, they may not always be as effective in the developing world. Areas of legislation directly relevant to road safety should be identified and all traffic laws reviewed and consolidated.

Drinking and driving is a proven cause of accidents. Enforcement of prescribed limit legislation has led to reductions of associated deaths and injuries in many countries. It is recommended that similar legislation prohibiting driving while under the influence of drink or drugs be devised that specifies a quantitative upper limit.

## PRIORITY ACTIONS NEEDED

1. Review existing legislation and prosecution patterns to identify areas needing to be revised, and weaknesses in current legal system regarding citations and prosecutions.
2. Where it does not already exist, develop and introduce urgently legislation on drunk-driving limits and enforcement, speed zones and speed enforcement, seat belt and motorcycle safety helmet wearing, and compulsory third party motor insurance.
3. Where it does not already exist, develop and introduce urgently legislation on a national road safety council (NSRC) or similar to oversee coordination and improvement of road safety.

**Traffic legislation provides the framework for traffic police and other enforcement agencies to ensure compliance with driving rules and regulations. Existing legislation should be reviewed, updated, and consolidated wherever possible. Legislation on drunk-driving, seat belt and safety helmet wearing, and speed zones where not already existing, should be introduced as a matter of urgency.**

## 1 INTRODUCTION

These sector guidelines on “Traffic Legislation” are from a set of *Road Safety Guidelines for the Asian and Pacific Region* policymakers, developed as part of a regional technical assistance project (RETA 5620: Regional Initiatives in Road Safety) funded by the Asian Development Bank (ADB).

This section cannot cover specific items of legislation in particular countries. It will, however, examine strategic issues that impinge upon road safety so that local legislation can be compared and evaluated to assess the need and practicality of updating it.

## 2 WHY IS TRAFFIC LEGISLATION NEEDED?

**T**raffic legislation regulates the use of public roads and provides a framework to promote and, where necessary, to enforce safer road user behavior. This is done by requiring compliance with specified standards for the benefit of all road users.

It is therefore necessary that there be a clearly defined framework of legislation supported by detailed regulations that are appropriate and relevant to the needs of modern traffic, and that permit effective enforcement to be carried out by relevant agencies to ensure safe and orderly use of the public road network.

Unfortunately, much of the legislation now in place in many developing countries of the Asian and Pacific region has evolved from the legislation of the colonial powers. This legislation has in only a few cases been comprehensively updated to meet modern needs. In most cases, however, this has been done simply by ad hoc changes as needed. This often results in confusing mixtures of old and new legislation and resultant ambiguity both for the public and for those enforcing the law. There are often problems and delays in judicial processing of traffic offenders, reducing the effectiveness of enforcement.

Traffic legislation updating is needed in developing countries where motor vehicles have increased rapidly in both numbers and

capabilities, and where the existing traffic law no longer meets the needs of modern traffic conditions. As numbers of vehicles increase, it has become increasingly necessary to regulate road users and use of the road to minimize conflicts and to improve road safety.

It is therefore first necessary to consider how existing legislation could be reviewed, updated, and strengthened. This is best done through a systematic revision process, as detailed below:

The specific objective of traffic legislation should be clarified in order to ensure the legislation is written as clearly and effectively as possible and that it is appropriate for the local environment. Legislation can rarely be self-enforcing. It can only be effective if it can and will be enforced and if offenders can be processed by the judicial system. All traffic legislation should be reviewed according to the following criteria:

- 1) is there a need for the regulation?
- 2) is the regulation acceptable in principle and of practical application to the majority of the user population?
- 3) is it framed so as to be clear and unambiguous?
- 4) is it consistent with other regulations?
- 5) is the user population aware of it? and
- 6) is it enforceable?

Given the limited traffic policing resources that are characteristic of developing countries (especially in South Asia where many of the

lower ranks of traffic police personnel are not even authorized to cite traffic violations), these considerations are even more relevant. Traffic regulations should be kept to the basic minimum to increase their chances of being enforced.

Ideally, traffic legislation (passed as a traffic act by government) should provide the umbrella framework, and details should be specified in the regulations that are within a minister’s authority and hence are much easier to revise. Examples where such flexibility would be beneficial include: speed limits, traffic fines and penalty points, and blood alcohol limits. These are all areas where standards may change from time to time given accident trends, public opinion, or new developments in equipment, and such regulations should be updatable quickly without the need to alter the main traffic act.

There have been recent moves towards eliminating the traditional legalistic style of writing traffic legislation and framing it so the public can understand. Given the education levels among the road users in the Asian and Pacific region, there is much advantage to be gained in writing traffic legislation in as clear and straightforward style that is readily understood by all.

Traffic legislation will have a much better chance of being accepted if it has been developed by a multidisciplinary team that includes private and public sector interests, as well as traffic police and traffic engineers.

The revision process should be guided by an independent specialist with recent experi-

ence in framing or updating legislation. Use of such an informed but neutral independent specialist ensures that best advice is given unconstrained by territorial or organizational loyalties of the key agencies involved in enforcement.

Publicity campaigns should be implemented to inform the public of any proposed changes in legislation and the associated reasons, so that they are fully aware of the new requirements before enforcement commences.

### 3 KEY COMPONENTS

A number of areas of legislation can have significant effects upon road safety. Legislation is needed on the following key areas:

- 1) driver-related;
- 2) vehicle-related;
- 3) control of traffic;
- 4) traffic signs and markings; and
- 5) fines and penalties

Only the most important aspects of legislation are summarized below as many of the elements are covered in the other individual sectors of these guidelines.

#### 3.1 Driver-related Issues

There is no inherent right to drive a motor vehicle on a road. So a motorist must be

**Table 1: Typical Safety Issues that Need to be Covered within Traffic Legislation**

<p><b>Driver-related</b></p> <ul style="list-style-type: none"> <li>• Driving instructors</li> <li>• Driving schools</li> <li>• Learner licenses</li> <li>• Driving tests                             <ul style="list-style-type: none"> <li>– medical</li> <li>– theory</li> <li>– practical</li> </ul> </li> <li>• License holders</li> <li>• License categories</li> <li>• Professional drivers</li> </ul>			<p><b>Highways-related</b></p> <ul style="list-style-type: none"> <li>• Authority</li> <li>• Statutory responsibility</li> <li>• Access/development control</li> <li>• Signs/markings</li> <li>• Speed zones</li> <li>• Traffic calming</li> <li>• Safety audit</li> </ul>		
<p><b>Vehicle-related</b></p> <ul style="list-style-type: none"> <li>• Condition/construction requirements</li> <li>• Roadworthiness testing</li> <li>• Safety belts/equipment</li> <li>• Dangerous loads</li> <li>• Documents/insurance</li> </ul>	<p><b>Fines/penalties-related</b></p> <ul style="list-style-type: none"> <li>• Traffic accident Investigation</li> <li>• Penalties</li> <li>• Courts/hearings</li> <li>• Fines</li> </ul>	<p><b>Traffic control/general safety-related</b></p> <ul style="list-style-type: none"> <li>• Drunk-driving</li> <li>• Seat belts</li> <li>• Speed limits</li> <li>• Pedestrians</li> <li>• Road user education</li> <li>• NRSC</li> </ul>			

granted permission to drive by way of a license issued by the state, provided certain criteria relating to health, age, and competence to drive are met. Driver training and testing are covered more comprehensively in Sector Guidelines 4.7, but some of the key legislation-related issues concerning licensing are listed below.

#### **a) Driving instructors and driving schools**

Many countries find it useful to have a registration system for driving instructors and (separately) for driving schools, and no one is allowed to give paid instruction unless a special test is passed to become a registered driving instructor. This ensures that driving instructors have the necessary competence and knowledge not only of driving but also for teaching and instructing learners. The registration of schools ensures that they meet at least minimum standards and criteria on premises, vehicles, teaching aids, and qualified instructors. In some countries (e.g., Fiji) driving instructors are encouraged to take defensive driving courses and to include some of these elements into their training of learner drivers, while driving schools are being encouraged to set industry standards and controls.

#### **b) Learner licenses**

In many countries, new license holders are constrained in the types of vehicles they can drive by restrictions placed on the driving license. Engine size of motorcycles and cars may be limited. Learner car drivers in most coun-

tries usually have to be supervised by an experienced driver at all times until a driving test is passed. Consideration should be given to introducing a requirement that motorcyclists should have had at least four hours of off-road training in basic maneuverability skills before being issued with a learner license (such training can often be provided by motorcycle dealers and driving schools). Driver training regulations should be restricted to those that can be enforced.

#### **c) Driving tests**

A driving test is designed to ensure that at least a minimum standard of competence is achieved by a driver before being allowed unrestricted access to the public roads, subject to other criteria in respect of vehicles or classes of vehicle. Driving test standards vary throughout the world, from minimal vehicle control maneuvering demonstrations to sophisticated multipart tests. The latter may include a medical test to ensure physical fitness to drive and a theory test on road knowledge before the third, **practical** part of the test (a drive of about 30 minutes in varied road conditions accompanied by an examiner). Generally, it is thought that more extensive tests produce better, and therefore safer, drivers.

#### **d) License holders**

Age is only one consideration in assessing the suitability for a driving license. It is appropriate to set minimum standards of health and eyesight on applications for a license. As such medical conditions may manifest themselves later in life, it is appropriate to require the holder to notify the license issuers of specified medical conditions once aware of them. It would also be appropriate, if a regular license renewal system is in operation, to restate a health warranty at time of renewal. Graduated licensing programs have been used in motorized countries to prevent novice drivers from exceeding their capabilities. This is achieved by restricting motor vehicle choice and driving times. In some countries, novice drivers use a "P" plate to make easier detection of novice driver violations. In Japan, for example, novice motorcyclists are forbidden from carrying passengers for the first year.

Retraining courses are being proposed for drivers convicted of certain driving offenses.

**Plate 1:**  
**Motorcycle training,**  
**Singapore.**



Programs have been introduced in a number of countries (including the Philippines) where drivers caught speeding are required to undergo a day's retraining, but there is little hard evidence as to whether such courses are effective.

#### **e) License categories**

In most countries, a system will already exist that categorizes vehicles into classes and the license applies to certain types of vehicle depending on the driving tests undertaken. Commercial licenses should also be incorporated within the basic driving license system but require additional criteria related to competence, age, and driving experience.

#### **f) Professional drivers**

Most countries require a higher minimum standard (e.g., 25 years age and at least five years' driving experience) for eligibility to become a professional driver of heavy goods vehicles (HGVs) and public service vehicles (PSVs). There should also be a requirement to carry out a driving test in the type of vehicle for which such a license is being requested. It should not be permissible to pass a test for a private vehicle and to then, after some time start driving an HGV or PSV. An additional more stringent test must be taken in an HGV or PSV to ensure competence to drive such a vehicle, not only because of the greater skill level required to control the larger vehicles but also the greater potential risk to public safety.

### **3.2 Vehicle-related Issues**

Legislative controls are needed to ensure the roadworthiness and safety of a vehicle at registration and throughout its working life. Vehicle safety standards and inspections are discussed in Sector Guidelines 4.9, but some of the key legislation-related issues concerning vehicles are:

#### **a) Condition of vehicle**

The enforcement of laws about vehicle condition and operation are the responsibility of traffic police, often working with the land transport department's vehicle inspectorate.

**Tires:** One of the most common vehicle faults that contributes to road accidents is tire defects. It is recommended that there be require-

ment of at least 1 millimeter (mm) of tread pattern over the entire width of the vehicle and around the circumference. The limit could justifiably be raised to a higher level, say 1.6 mm, at a later date when general conditions of vehicles improve.

The lack of tread is not the only potentially dangerous defect associated with tires. Failure of the internal ply structures and cuts that expose the ply structure weaken the tire, inviting total failure. Mixing of tires of differing ply constructions is also dangerous as radial and crossply tires have different reactions to physical forces acting on them. When cornering at speed, the difference in grip may be so great as to cause the crossply tire to lose all grip and the vehicle to become uncontrollable.

These defects can easily be incorporated in legislation. It is recommended that a catchall provision be attached to outlaw the use of tires used under "unsuitable" conditions. Such provisions should also be used with brakes and steering.

**Lights.** Lights are essential for the driver to see the road ahead clearly and be seen by other road users. A minimum standard of front lights, rear lights, brake lights, reflectors, and direction indicators should be defined appropriate to each country and required by legislation. Subsequently, there should be a requirement to maintain the lights in efficient working order.

**Glass.** Three- or four-wheeled motor vehicles should be required to have a **laminated glass** windscreen at the front that should be maintained to allow a clear and unobstructed view. Thus, cracked or shattered screens would not be lawful and use of vehicles with **toughened** glass windscreens (which can cause much more serious injury in an accident) should not be permitted.

**Dangerous condition.** In order to cover the unforeseen and to save legislating for every possible safety-related defect on a motor vehicle, a provision to cover using a motor vehicle on a road in a dangerous condition should be considered. Such a section would cover defective shock absorbers or corroded shock absorber mountings, which are directly related to safety, and defects to the structure or chassis from which failure can result.

#### **b) Testing of vehicles**

In most parts of the world, imported vehicles are "type" tested to ensure they meet local

standards. In addition, all imported and local vehicles are periodically tested by government testing stations or by authorized private testers. Experience in many countries suggests that the poor condition of many vehicles, despite display of a “pass” disc or sticker, must throw into doubt the quality or vigor of testing. The general aims of road safety can be covered by an annual test of vehicles more than three years old, supplemented by random roadside spot checks and technical examinations of vehicles by government vehicle



**Plate 2:**  
Inadequate road  
worthiness testing results  
in unsafe vehicles.

inspectors, the traffic police, or (more usually) both acting in partnership.

It is recommended that powers to prohibit further use of the vehicle, either immediate or subject to conditions, be enacted until the defects have been repaired.

A vehicle defect rectification scheme is increasingly used in industrialized countries ensuring that the vehicle is made roadworthy. In this system, a vehicle is stopped and the appropriate defect identified. The driver is offered a chance to either repair the defect within 14 days and present the vehicle for testing, or go to court.

The vast majority will accept the former option. They have the vehicle tested and submit the certificate of testing, or prove that the vehicle has been scrapped or broken up. Then the matter is closed.

If the offer is not accepted or the certificate of testing is not submitted within 14 days, court proceedings automatically follow. However, the problem in most developing countries is tracing the vehicle. It may be appropriate to confiscate the vehicle documents and driver license until the vehicle is brought back repaired.

Advantages of the scheme are that unroadworthy vehicles are repaired (which cannot always be guaranteed in the case of court proceedings) or broken up. It may also produce revenue for government testing stations, with possibly a fee levied on submission of certificates of testing or breaking up. It also relieves the courts of the burden of dealing with minor offenses unnecessarily.

### c) **Dangerous loads**

Another feature common to many countries is the precarious manner in which passengers and loads are carried on the roof or hanging on to the outside of vehicles. Again, an all-encompassing provision is recommended to prevent the carriage of a load in such a way as to endanger any person. Further provisions that refer to total gross and axle weights should also be considered.

### d) **Safety belts and safety equipment**

Increasingly, traffic legislation includes requirements that safety belts be fitted and sometimes that other safety equipment (e.g., reflective advance warning triangle for use in breakdowns) be carried. It is important that such equipment meets appropriate local criteria and it is often best to base such criteria on those used in other more motorized countries. All major motor manufacturers already manufacture equipment to such standards, making compliance more likely and avoids the risk of sub-standard equipment being permitted onto the market.

### e) **Documents/insurance**

The legislation must always incorporate rules or requirements relating to the use of vehicles. Apart from requiring that the vehicle be in a roadworthy condition, there should be clauses requiring that vehicles be licensed by the relevant authorities, for correct vehicle registration documents to be held by the owner (to prove ownership), and for at least third party motor insurance to have been taken by the owner or driver to cover damage or injury to innocent third parties. If it is made compulsory that vehicle registration, insurance, and roadworthiness certificates have to be shown when licensing a vehicle and at the same time, that vehicle registration, roadworthiness, and license documents must be shown when seeking insurance, a degree of cross-checking can be introduced. This acts as a useful control to deter motorists who might otherwise drive without insurance or without a roadworthiness certificate. For this to work best, it is necessary for all vehicles to be licensed annually, and for the expiry date on annual licenses to be easily seen and checked from outside the

vehicle. This is often done by requiring the certificate to be prominently displayed on the windscreen so that passing police officers can easily see if the certificate is valid.

### 3.3 Highway-related Issues

#### a) **Authority**

There needs to be clear-cut indication in the legislation defining who is responsible for what in terms of traffic and use of roads. This might, for example, specify the differing roles and responsibilities concerning traffic of the ministry of transport or public works, provincial governments and municipalities, or national police.

Of particular importance is that it should specify wherever possible a statutory responsibility upon each highway or roads authority (whether national, provincial, or municipal) “**to monitor and improve road safety on their respective road networks.**” Sector guidelines 4.4 and 4.5 cover engineering-related matters and 4.11 covers police traffic law enforcement in more depth, but some of the important legislative issues related to roads and enforcement are given below.

#### b) **Access and development control**

Each highway or roads authority must be given the right to comment to the planning or development control agency on any proposed land use development on land adjacent to a road and from which access may be required. In particular, they must be given the right and authority to refuse access from such developments unless the access can be provided without causing undue traffic or safety problems. Anyone wishing to create access onto a public road must be required to apply for permission and approval from the relevant roads authority.

#### c) **Speed zones**

Each highway authority should be entitled to categorize its network in terms of road hierarchy and to specify appropriate speed zones depending upon the function that particular roads or sections of the network is supposed to provide. This may include imposition of lower speed limits, physical speed reduction devices, and traffic calming in residential areas or as rural roads pass through communities straddling the road.

#### d) **Safety audit**

Highway authorities should be required to systematically check proposed new or rehabilitation road schemes from a safety perspective at preliminary design, detailed design, and just after construction (but before opening) stages. These safety checks should be undertaken by road safety specialists to ensure that the needs of all road users (especially vulnerable road users) have been taken into consideration. This formal process known as “safety audits” is important to ensure development of safer road networks.

#### e) **Traffic calming**

Traffic calming regulations are made to provide local highway authorities with the necessary powers to construct speed reduction and other measures for traffic calming that are not otherwise clearly authorized. Provision may need to be left for detailed specifications via ministerial regulations.

#### f) **Traffic signs and road markings**

Traffic signs and markings should be as specified by the relevant ministry for roads, but should be compatible with relevant international conventions.

At present, many traffic signs in developing countries are based on outdated standards and the sign size is often too small for adequate visibility when drivers are traveling at currently permitted speeds.

### 3.4 Traffic Control and General Safety

Most legal systems consider the manner of driving under two categories:

- 1) **reckless** where the driver acts in such a manner that serious consequences can be foreseen; and
- 2) **careless** but nevertheless (for the protection of other road users and the maintenance of an adequate standard of driving) deserving of a sanction.

The consequences may be taken into account if death results and the offense is considered to be more serious if the driver was reckless.



**a) Drink-driving**

Any review of legislation from a road safety perspective should include drinking and driving legislation as a priority. Experience from several countries has shown that road deaths can be reduced by around 15 percent by strict enforcement of this legislation.

This is done by prescribing a limit to alcoholic intake above which a driver commits an offense. Blood alcohol concentration (BAC) levels of between 20 milligrams (mg) and 100 mg of alcohol per 100 milliliters (ml) of blood are typically used in developed countries, with most countries adopting a level of 50 mg/100 ml of blood or lower. It should be noted that accident risk increases markedly with the BAC level. At BAC 50 mg/100 ml, accident risk is twice as high as at zero BAC level, while the accident risk at 100 mg/100 ml is almost eight times as high as at zero BAC level.

The investigation of an offense starts with a power to require a driver to supply a specimen of breath into an alcohol screening device. A positive result (i.e., BAC in excess of some prespecified level) may in some countries be sufficient to prove an offense. In other countries, a further test is carried out on an evidential machine (at a police station) after the driver's arrest. The reading obtained quantifies the level of alcohol in the blood as ascertained from a specimen of breath, which both proves the offense and identifies the seriousness of the transgression. A blood test could be considered as an alternative, but carries severe problems, such as difficulties in ensuring availability of medical staff and keeping the specimen in a satisfactory condition before analysis. Also, continuity of evidence questions may crop up with specimens of blood, so this method should be avoided wherever possible.

It is strongly recommended that an alcohol limit of 30 mg to 50 mg or less be adopted in all countries as a matter of urgency. Random testing should also be adopted so that any driver at any time could be required to give a specimen. Wherever possible, the roadside test using mobile alcohol testing devices should be regarded as sufficient evidence for prosecution in develop-

ing countries. This is more affordable when first commencing such a program and avoids, at least in the early years, the high investment that would otherwise be needed to place and maintain expensive evidential machines in all police stations.

From a road safety perspective, the prevention of drinking and driving is vital. Additional provisions may have to be considered where drugs are taken and the effects and safety implications are the same as drinking and driving, but evidence can be obtained only from a laboratory test or a physical examination by a doctor.

**b) Speed limits**

Maximum speed limits should be set for urban and rural areas that allow for lower speed limits near schools, hospitals, or other areas (see Sector Guidelines 4.4 on traffic calming). It is important to stress that speed limits represent maximum limits and police should enforce these strictly, especially where pedestrians and other road users are at risk.

Reduced speeds in urban areas and in designated area-wide zones have proved effective in reducing the number and severity of road accident injuries in many motorized countries. Designation of certain locations as reduced speed zones should be permitted under the traffic legislation.

**c) Following too closely**

Drivers should be required to maintain a safe distance between their vehicle and the rear of the vehicle ahead as the driver in the following vehicle will almost always be held accountable for any accidents with the vehicle in front. This distance will vary according to speed, weather, and road conditions and should be clarified in driver training and in a highway code. However, the law should specify that the driver at the rear in such an accident is automatically considered to be at fault unless extenuating circumstances can be shown.

**d) Give way procedures**

Priority rules should be specified in legislation and properly signposted as a reminder to road users. Give way rules are required to cover intersections, turning movements, parking, approaching emergency vehicles, and entering congested intersections.

**Plate 3:**  
Police spot checks on drunk driving.



### e) **Pedestrian rights and requirements**

Given the large share of road accident casualties accounted for by pedestrians in the Asian and Pacific region, traffic legislation must clearly state priority. Drivers should be required to stop for pedestrians at formal pedestrian crossings and parking or overtaking near a pedestrian crossing should not be allowed. When turning, drivers must be required to give way to pedestrians already crossing.

Pedestrians can be legally required to use nearby pedestrian crossings and to walk on the footpath when it is provided.

### f) **Motorcycle helmets**

Mandatory motorcycle helmet usage in rural areas was required as far back as 1970 for Singapore but as late as 1995 for Viet Nam. It should be introduced nationwide in all countries. Available accident data generally will provide evidence that motorcycle and passenger head injuries are occurring and that mandatory motorcycle helmet wearing will save lives and injuries. Exemptions for wearers of turbans is usually necessary. However, the capacity for enforcement must be taken into account and it is essential that a safe standard is specified for helmets and that efforts are made by government to ensure such helmets are readily available from many outlets and suppliers at an affordable price.

### g) **Seat belts**

Introduction of legislation requiring wearing of seat belts and effective enforcement has resulted in significant reductions in road deaths in many developed countries (e.g., 23 percent reduction in the United Kingdom (UK) when first introduced) so it can certainly be justified. Seat belts have been required on a partial basis (e.g., on expressways only) in some Asian and Pacific countries for a number of years. The proportion of car drivers and passengers killed or injured in the Asian and Pacific region is much less than in the industrialized countries, and seat belts will therefore have a much less significant impact in countries where pedestrians and motorcyclists form the majority of traffic deaths. Nevertheless, it is a measure likely to save many lives.

Seat belt legislation normally needs to be introduced in stages: first making **seat belt fitting** compulsory on all cars being imported or

manufactured, and **seat belt wearing** compulsory when seat belts are available. Later the requirement for fitting can be extended to all cars less than five years old and eventually to all cars of any age capable of carrying at least one passenger. Police must have strong powers of enforcement and must exercise them if the full benefits are to be achieved.

### h) **Nonmotorized vehicles**

Although traffic regulations are assumed to apply to all road users, pedestrians, bicycles, and other nonmotorized vehicles (NMVs) are ignored in the traffic legislation in some countries. Traffic regulations should apply fairly to all those using public roads and should not discriminate against slow-moving and NMVs. Given the very large numbers of vulnerable road users involved in road accidents in the Asian and Pacific region and the high proportion of nonmotorized traffic in many countries of the region, much more should be done to recognize the legitimate needs and requirements within the traffic stream. Legislation could, for example, be drafted to give priority to NMVs in certain situations and to provide protection for NMVs in their conflicts with motorized vehicles in the traffic stream.

### i) **Postaccident requirements**

All injury accidents should be reported to the police and providing assistance to the injured should be a requirement of all those involved. However, given the threat of danger in some societies to those perceived as responsible for accidents, developing countries may also want to consider making it a specific crime for bystanders to harm those involved in road accidents, although the difficulty in enforcing this must first be considered.

### j) **Highway code**

There should be provision for a highway code to be produced by the relevant department. In most countries, highway codes are only advisory whereas in the UK, where the word “must” is used, the *Highway Code* refers to actual legal requirements. In Malaysia, the *Highway Code* was published as regulations in 1959 and the Sri Lankan *Highway Code* is also supported by regulations.

The highway code should provide an overview in nontechnical language of traffic rules and obligations of all road users.



**Plate 4:**  
Highway codes are used in many countries.

### k) **NRSC**

An NRSC should be constituted with statutory powers to oversee road safety improvements. Ideally the NRSC should be established directly under the prime minister's office because many ministries are involved. Legislation should also specify powers, provide for funding and establish a permanent secretariat to implement, follow up, and coordinate NRSC decisions. More information on NRSCs is provided in Sector Guidelines 4.1.

### l) **Insurance requirements**

Third party insurance should be made mandatory for all drivers, whether driving a private, commercial, or government-owned vehicle, and motorists should have to show registration documents and a roadworthiness certificate before insurance is awarded. Conversely, for annual vehicle registration a roadworthiness certificate and a valid insurance certificate should be required.

A levy on third party insurance premiums should be dedicated to funding an NRSC and its operations. The authority to impose such a levy should be granted in the legislation, with the specific amount and consultation process (to set the amount) determined by ministerial regulations.

## 3.5 Fines and Penalties

### a) **Level of fines and fine collection**

Studies in motorized countries have shown **risk of detection** to be a stronger deterrent

than **high penalties**. If encouragement of compliance with regulations is the primary objective, then this suggests it would be better to be giving many smaller penalties rather than fewer high-priced ones.

“On-the-spot fines” are useful for minor offenses but problems with accountability can prevent these quick and simple penalties from being used in many developing countries. In several Asian countries, including the Philippines and Viet Nam, to overcome such “accountability problems,” traffic fines cannot be paid directly to the traffic police but must be paid at a separate authority such as a national bank or post office. The delay incurred in being stopped and the inconvenience and time involved in paying a fine should encourage the road user to comply with the traffic regulations, and so the method is worth considering.

The penalty system should consider the optimal division of responsibility between the traffic police and the courts that will be unique to each country. Court-imposed penalty systems can sometimes overwhelm civil courts to the point that judgments become delayed, tending to reduce the deterrence effect of the enforcement system.

Fixed penalty notices are used where proceedings are commenced by police but settled on payment of a fixed penalty or fine, or combination of fine and penalty point (see below). They relieve the courts of burdensome minor matters and generate revenue. They have been used to sanction drivers for noncompliance offenses, disobeying signals, excess speed, and other safety-related offenses. Thus even though traffic volumes and the number of offenses increase, no increases are required in judicial or prosecution resources.

### b) **Penalty point system**

Penalty point systems have existed in legislation for many years but have rarely been implemented effectively in developing countries. Driving convictions can be marked on the driving license but this practice is rarely enforced in developing countries. Penalty point systems have proven successful in industrialized countries where driving license details are computerized, accurate, and up to date. In most developing countries, accurate computerized records are rarely available but such systems should be introduced when feasible.

### **c) *Disqualification of license holder***

While often included in traffic regulations, many countries at present lack the administrative support to cancel driving licenses and ensure new driving licenses are not obtained. Absence of a central driver records register means that drivers often simply go to another province and get a new license, so the threat of disqualification becomes less powerful. Efforts should be made to establish a single master list of driving licenses (computerized) as quickly as possible, and provision retained within legislation for penalty points systems and disqualification.

### **d) *Fines used to finance traffic police***

Several countries (including Malaysia and the Philippines) have recently allowed a percentage of the traffic fines collected to be used to fund traffic police enforcement equipment, traffic police activity, or traffic police welfare. It is particularly appropriate where new and additional income is generated from use of new equipment (e.g., speed detectors or alcohol testing devices) or from new legislation such as seat belt wearing or drink-driving. While the arrangement may seem improper and encourage unrestrained fines being imposed, it does offer a way to increase funding for traffic police enforcement without having to rely solely on availability of government funds and provides incentives to the police to carry out enforcement. An alternative approach is used in the UK where the recent Sponsorship Act allows private sector funding to go directly to the traffic police rather than to general revenue.

## **4 STAGES OF DEVELOPMENT**

### **Stage 1: Colonial/Outdated System**

Traffic legislation in many developing countries is still heavily based on colonial motor vehicle codes and has been outdated and inappropriate for controlling traffic and improving road safety for years.

Such legislation was developed when there were few cars, traffic conflicts were not a serious issue, and before the onset of modern

traffic control devices such as traffic signals, or modern enforcement equipment such as radar speed detectors and alcohol detectors. NMVs may not be included, insurance requirements insufficient, and speed limits inadequate. Road signs may be in sizes too small for current speeds and in individual and unfamiliar designs.

While the inadequacies of the traffic legislation are clear in such circumstances, what is less well known is how to correct these deficiencies in the most effective manner. Instead, piecemeal amendments are often added to the old base as needed, and the result is often confusing and ineffective.

A typical amendment might be the requirement of motorcycle helmets for riders (but not always passengers) and perhaps seat belt wearing in certain areas only (e.g., rural highways).

### **Stage 2: Legislative Revision**

With the inadequacy and problems of ad hoc amendments realized, traffic police and transport authorities begin pressing for legislation revision. For convenience sake and lack of an alternative, the existing regulations may be used as the foundation for the revised traffic regulations.

However, the individuals assigned to rewrite the legislation (sometimes only one person and often without relevant training as such skills are not always readily available) are often within the ministry of transport, and negotiations with other ministries can go on for years. Traffic legislation revision has taken more than a decade in Indonesia and Pakistan because of interministerial rivalries and revision has also been ongoing for the past few years in Bangladesh.

In Nepal, traffic legislation was updated in 1993, but the traffic police were not allowed to contribute to the revision process even though they have to enforce it. Much confusion has resulted both in what is required by road users and how the legal proceedings are to be settled.

### **Stage 3: Working Group Committees**

To help ensure that the traffic legislation produced will be acceptable to the public, a

working group should be formed with participants from within the government as well as outside, and should include private and public sector transport operators as well as transport specialists. This is often best done under the nonpartisan and neutral umbrella of the NRSC as it minimizes ministerial rivalries. It is imperative that the traffic police are included in the traffic legislation revision committee to ensure practical experience is used and to obtain their support. With the assistance of specialists (technical assistance may be needed from abroad), the traffic legislation should specify blood alcohol limits and testing procedures, seat belt requirements, and the optimal distribution of responsibility as appropriate for that country between individual ministries, and between traffic police and the courts.

#### **Stage 4: Standardization and Automation**

The desired situation is attained when traffic regulations are streamlined with optimal distribution between legislation and regulations, and regional standardization achieved. Provision for use of modern automated techniques of traffic control, such as red light cameras and modern enforcement equipment, should be covered under the traffic regulations. A legal requirement will have been imposed on every road authority to try to improve road safety on its road network and traffic calming regulations will have been specified.

### **5 BENEFITS AND EFFECTS**

Traffic legislation provides the legal framework for traffic police enforcement and specifies the requirements for safe road user behavior that will benefit all road users. Modern traffic legislation should contain a safety focus rather than the old-fashioned administrative and document-related concerns characteristic of older, outdated legislation.

When properly developed, traffic legislation and regulations must include not only information about road use but also a streamlined punishment system with an adequate deterrence effect upon road users. Compliance

with the traffic regulations results in increased predictability and uniformity of behavior of road users, reducing the risk of road accidents.

### **6 EXAMPLES OF GOOD PRACTICE**

In the Asian and Pacific region, the **State of Victoria, Australia**, can lay claim to concise and clear traffic regulations. The last major revision was in 1988<sup>1</sup> although such articles as drink-driving limits have been strengthened since then.

For regional code standardization, two sources, although both from outside the region, could prove useful.

The Uniform Vehicle Code<sup>2</sup> in the **United States (US)** provides a guide for harmonization of traffic legislation between the 50 states. In the last decade, a model traffic statute was also produced for **Southern Africa** (along with a *Highway Code* and *Road Signs and Markings Manual*<sup>3,4</sup>). This may offer a base mode that could be adapted.

### **7 REFERENCES**

1. Road Safety (Traffic) Regulations 1988: Road Safety Act 1986. Victoria, Australia.
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4. SATCC. *SATCC Highway Code*. Norway: Institute of Transport Economics.
5. Zaal, D. 1994. *Traffic Law Enforcement: A Review of the Literature*. Australia: Federal Office of Road Safety.
6. Axup, D. 1993. *Enforcement: Traffic Safety Toolbox*. Washington, DC, US: Institute of Transportation Engineers.
7. Legal Research Board. 1992. *Road Transport Rules*. Laws of Malaysia. Malaysia: International Law Book Services.

# Road Safety Guidelines for the Asian and Pacific Region

The guidelines cover 14 individual sectors affecting road safety, with four introductory chapters and four appendices. Information is presented in a series of freestanding documents that can be extracted for distribution and discussion.

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