



## **Deliverable 5**

# **Legal and administrative measures to support police enforcement of traffic rules**

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## EXECUTIVE SUMMARY

This report addresses the question of how legal and administrative systems may support the operation or effectiveness of the total system of traffic law enforcement. In *Chapter 1* road safety and traffic enforcement are presented as the efforts of several inter-linked organisations and subsequently we discuss the possible meanings of the term “support” for police enforcement. In our modern society we will increasingly find many organisations committed to or involved with road safety problems. Success or failure of an enforcement policy is not only determined by the internal functioning of the police organisation, but determined by the way in which different organisations, police, road authorities, publicity organisations etc. work together in a professional network and co-ordinate their activities. In this view, the quality of traffic law enforcement is determined by the extent to which activities are geared to each other to make up an effective chain of enforcement and supporting measures.

*Chapter 2* provides an introduction to the various links in the traffic law enforcement chain. Table 1 gives an overview of the main structure the traffic law (Goldenbeld, Jayet, Fuller and Mäkinen, 1999). Special attention is given to the distinction between criminal and civil law systems. In practice, in almost every European country the legal system for processing of traffic violations is always a mix of criminal and administrative procedures.

**Table 1. Ideal-type representation of global structure of legal systems**

Domain of law	Specification	Law system	
		Criminal law: ideal-type	Civil law: ideal-type
Traffic behaviour	Variation according to time, circumstance, vehicle type	Focused on infrequent behaviours	Focused on frequent behaviours
Detection of traffic violations	Use of method Use of instrument Procedure	Evidence weighed by court or court personnel	Evidence only in exception weighed by court
Prosecution of traffic violations	Admissible evidence Weighing evidence Mitigating circumstances	Individualised procedure handled by courts	Standardised administrative procedure
Sentencing offenders	Minimum/maximum Penalties Scale of penalties	Individual (severe) punishment	Standardised (light) punishment

The criminal or penal system usually follows three separate stages: detection, prosecution and sanctions. Each stage passes through the hands of a specific competent body such that the sanctioning of an offence is linked by the police, public prosecutor and judge interventions up to the sentencing. In criminal law, usually a large range of penalties can be imposed, from the loss or restriction of liberty (prison penalty) or rights



(driving licence), to financial penalties (day-fine, fine-unit, fines based on the offender's social status) or alternative solutions such as community work (day-unit). Provisions of legal procedure are used for controlling the validity of the detection and prosecution stages.

In the administrative systems, the three sanction stages are combined into a single one, there is no prosecution, no judgement and the violation of a regulation is directly sanctioned. The administrative sanction cannot include liberty penalties but can apply the loss or restriction of rights (driving licence) and it mostly uses the financial penalty with fixed or unfixed amounts.

When the administrative legal systems support the action of traffic law enforcement, the responsibility for the whole enforcement process rests on the shoulders of the police bodies (even when the police do not receive the fine payment, and while an appeal in court is possible). Within the administrative frame, the traffic law systems win in autonomy while the role and power of police bodies are highly increased and decisive. Administrative systems bring together many aspects of the deterrence thinking of enforcement. The whole punishment process is condensed to the time of detection, with the subsequent time reduction in the process duration, the automatic application of sanction (under the restriction of police discretion or losses at the stage of fine payment).

In *Chapter 3* several address issues are addressed concerning the effectiveness of different links in the legislative system to help traffic law enforcement. Several EU countries have experimented with and, in part, implemented laws that allow traffic regulation infringements to be treated under civil law with the accompanying simplification of procedures and possibilities of appeal. In the first instance, this has been applied to parking violations (and road taxes) but it is now being extended to all traffic violations that are committed on a regular basis (i.e. not causing accidents/injuries).

It can be clearly seen from the descriptive examples and the succinct descriptions in appendix A that, even in countries in which traffic legislation is part criminal law, there is a tendency to move towards a simplified system of using sanctions. This is mainly due to two facts. First, the vast size of transportation systems makes traffic violations "bulk offences", that no system can handle efficiently in case a strictly criminal type of approach is applied. Second, automated enforcement methods make it possible to generate a huge number of cases that would suffocate courts in case the approach would be that of a purely criminal system including summons to court. A clear indication of attempts to have a control over a great number of violations within a criminal-administrative systems is the use of de-merit point systems. In addition to that, most countries apply fixed fines, and in many cases they can be settled on the spot.

Even though there is some development and change in legal systems, it should be observed that the legal system lags several steps behind the fast technological developments that would enable implementation of new road safety measures. Legal systems face new challenges when technology will be used more extensively as supporting enforcement or as a part of enforcement systems. For example, automated



detection of speeding and other violations still creates a bottleneck in several countries, since the issue of owner liability has not been satisfactorily solved preventing the development of truly automated systems. Another example is that the use of alcohol interlock-systems requires legislative changes to even make the installation and experimentation possible. This issue needs to be urgently addressed when more in-vehicle safety systems are entering the market.

In *Chapter 4* different forms of administrative support (administrative law, point system, licence revocation) for traffic law enforcement are discussed. A specific support for traffic law enforcement focuses on preventing recidivism.

The following countries apply *point systems* in regard to traffic violations: France, Germany, Greece, Italy, United Kingdom and Poland. Among this group, France and Poland were the latest to introduce such a system. France started a point system in July 1992 and Poland in June 1993. On a general level, four main aspects constitute the registration in a penalty point system: 1. a traffic rule, 2. a situation in which the traffic rule needs to be obeyed, 3. a traffic participant breaking this rule and 4. the detection of the rule breaking behaviour by competent authorities.

In respect of the third aspect, the offending persons, effects of a penalty point system for three groups of traffic participants are to be distinguished:

- The first group consists of traffic participants who generally obey traffic rules and breaking these rules is rather an exception. This group is confirmed by the penalty point system to keep up their, in general, rule conform behaviour.
- To the second group belong traffic participants who usually follow the traffic rules but despite commit traffic violations occasionally. Therefore they only have a few penalty points. For this group the effect of the point system lays in the intention to avoid a high amount of penalty points not to risk severe sanctions. It can be assumed this deterrence effect encourages compliant traffic behaviour.
- The third group finally covers traffic participants who frequently break traffic rules. Especially this group is concerned of the consequences of a penalty point system directly. The withdrawal of the driving license has been reality or is forthcoming for a part of this group. Frequently these persons exceed the maximum point limit several times before a behavioural change follows.

In some countries, e.g. Great Britain and Israel, where most road offences (except for parking violations) remain part of the *criminal code*, there are procedures, which allow part of them to be treated in a mostly administrative way. Such is the practice in Great Britain with the Fixed Penalty Notices given to violators of automatic speed and red light cameras. The development of *administrative procedures* within a criminal law system can be taken one step further if the administrative procedures are part of a legal frame that is separate from the criminal law system. An example of this next step towards more administrative processing of traffic law offences can be found in the Netherlands.

The introduction of the new administrative law enforcement system in the Netherlands led to a workload shift from the police and the offices of the prosecution of the county courts to the direction of the Central Judicial Collecting Agency, a division of the Public



Prosecutors office. This has the advantage that traffic violations are no longer the task of the already overloaded divisions of the police and justice systems. To note, the implementation of parking taxation on paid parking has resulted in the fact that a substantial part of the light traffic violations (fifteen to twenty percent) are no longer dealt with by the police and justice institutions but by the local governments.

The *special rehabilitation programs* that have been developed to lower the rate of *recidivism* are discussed in *Chapter 5*. Rehabilitation systems have been developed to counteract high risk driving and target especially drunk driving, partly also excessive speeding and reckless driving. The degree of development of such systems and the ways of implementation vary a lot among European countries. In many countries such systems are not in use at all, in several countries experiments are conducted or some authorities or courts have the option to impose rehabilitation measures. Germany and Austria, however, have embedded rehabilitation measures on clear legal basis in their legislation and made rehabilitation part of the whole licensing system.

Since rehabilitation programs aim to prevent from recidivism, these programs become more reasonable and successful if they are part of a whole system of measures. Licensing systems are characterised more and more by a combination of education and enforcement strategies (graduated licensing systems, combination of probationary and provisional systems).

*Alcohol offences* have to be considered as a specific kind of offence and treated in a specific way. Rehabilitation programs for alcohol offenders have to consider different degrees of alcohol related problems, therefore a profound examination at least for high intoxicated offenders is strongly recommended as an accompanying measure with rehabilitation measures. Already the enforcement activities of the police can give some indicators on the severity of the alcohol problem. Measured alcohol concentration, certain circumstances of the offence may serve among others as criteria for assigning offenders to different treatment. Dependent from drinking culture certain kinds of rehabilitation measures will have different priority.

Concerning other traffic offences than drink-driving, psychological interventions seem to be more appropriate than skill- or knowledge-based interventions (usually high risk drivers are very skilful and are aware of what they are doing).

Apart of the special preventive effect rehabilitation, measures also can have a general preventive effect. The fact that certain traffic offences are not only treated with fines and license ban but also with rehabilitation programs can underline the normative character of traffic regulations. To achieve such an effect the rehabilitation programs need to be well known to the drivers and their concept must be understandable and reasonable.

In *Chapter 6 a synthesis* is offered of the present findings and the findings reported in an earlier Working Paper 4 (Support systems for police enforcement) and recommendations are offered for a planned approach improving the system of traffic law enforcement. In most European countries there are basically three frames of reference that set the basic parameters for police enforcement. These frames are: (1) the



road safety situation and objectives for this situation, (2) the road behaviour situation and objectives for this situation and (3) the situation of traffic law enforcement and the objectives for this situation. In an ideal situation, these frames of reference should be combined in order to reach a meaningful and realistic perspective on the road safety benefits of police enforcement and how police enforcement should be supported to achieve these benefits. In practice, the only way to achieve such a meaningful perspective is that several governmental agencies work together in order to establish a planned, agreed upon approach to police enforcement.

A planned approach could be made for a period of say 4 to 5 years, upon which there follows an evaluation. The planned approach should optimise the support conditions for police enforcement. These support conditions are various but can be subsumed under three general categories: acceptance, deterrence and monitoring. Under the umbrella of "Acceptance" we subsume all activities intended to generate public (and political) support for police enforcement procedures in traffic. Acceptance is very important since it is in a very real sense the moral "feeding ground" of deterrence. The fear of being detected by the traffic police for a traffic violation is ultimately rooted in the fear of more general social negative reactions to this particular offence. If a traffic offence is more or less tolerated by the general population, this will ultimately erode deterrence. "Deterrence", of which the backbone is the psychological fear or aversion of being detected for a traffic violation, is dependent upon general societal norms, but also dependent upon well-planned enforcement operations, that have a fast and clear follow in the subsequent steps in the enforcement chain. Strict and clear policing procedures followed up by quick legal procedures and possibilities for appeal will likely increase the acceptance of the enforcement system. "Monitoring" refers to the whole of activities and measurements undertaken to gain an understanding of the development of behaviour and enforcement parameters over time.

The following recommendation were given:

1. To integrate various support systems for police enforcement in one overall program, a planned multi-year approach to police enforcement should be set up.
2. A planned approach to police enforcement can only function at a regional level where fastness of decision-making and tactical and operational decisions can be taken in response to changes in traffic situations or special events or developments.
3. All parties involved in the enforcement chain should be involved in the planned approach.
4. A planned approach to police enforcement should as standard incorporate three equally important domains: (a) conditions for acceptance, (b) conditions for deterrence and (c) monitoring of results.
5. In the short term (say halve year or one year), evaluation of police enforcement should be guided as much or even more by behavioural data rather than only accident data.



6. Sets of laws and rules that were devised decades ago should be periodically revised to assess whether they still are relevant and clear to modern day traffic situations. Each rule should be checked to assess whether the situations to which it refers are outdated, whether the arguments for the prescribed behaviour still hold and whether this behaviour can be prescribed in more detail.
7. Under a criminal law system, it is advisable to carry out periodic surveys of judging practice, in order to ascertain the discrepancies between the police deterrence practice and actual punishment of violators.
8. In regard to the latest technological developments, legislation ought to be reassessed and reviewed throughout Europe making it possible to introduce new technical solutions as well as making better use of existing ones as enforcement support systems
9. It is recommended to create explicit agreement between various actors (legislators, police, prosecuting bodies) about the consequences that follow detection of offenders.
10. We recommend that the administrative notifications of traffic offences is combined with more personalised messages to the traffic offender, explaining the risks of the behaviour or location.
11. Introduction of automatic enforcement (under the criminal law system) should be accompanied by wide application of fixed penalty notices and special administrative procedures for their treatment.
12. One way to reduce overload of the police and justice systems is to allow more traffic regulation infringements to be treated under administrative law. The development of (administrative) support systems ought to decrease the burden of courts and the police rather than vice versa.
13. Yearly statistics about the inputs and outcomes of the total traffic enforcement chain should become available in integrated evaluative reports that contain some explanation of reliability of statistics and some interpretative comments on changes. On the national level, the different Ministries involved should co-operate in this evaluative effort.
14. Legal systems should as a standard, provide the use of different categories of rehabilitation programs as alternative sanction for heavy fines, license withdrawal or prison sentence. At present only some European countries provide for this alternative sanction.
15. More uniform sanction systems also based on the perceived fairness of drivers ought to be sought for and developed in Europe.
16. Tailoring sanctions to meet individual requirements needs further development.



17. Finally, EU societies should encourage the use of new technologies to prevent drivers from committing violations and decrease the burden of legal systems and the police. Road transport systems ought to be developed in a way that will make driver control systems unnecessary.
18. Monitoring of traffic behaviour should receive a higher priority on the national and regional level, since behavioural data are needed to complement accident data in order to arrive at valid conclusions about effectiveness of traffic law enforcement.
19. Monitoring of traffic behaviour should be done based on scientific method of sampling and registration rather than on basis of existing police records.
20. Preferably monitoring of traffic behaviour should be done in close co-operation between police, policy makers and non-commercial scientific institutes (Universities, national road safety institutes, police research institutes). At the highest governmental or political levels such research efforts should be stimulated rather than suppressed or ignored. If co-operation is difficult to realise at the national level, then it should be realised at some regional levels.
21. If monitoring on a national scale proves costly or difficult, then monitoring at least should be done in some specially selected provinces or regions.
22. We recommend that the following parameters of the enforcement system are monitored, be it at the national level or at specially selected regional levels: perception of police controls and penalties by the public, acceptance of the system by the public, perceived justice of penalties and procedures, willingness to co-operate with the system e.g. by paying tickets), costs in time and money of the judicial and administrative system, benefits such as time and costs “saved”, mean processing time of offence, number of court cases and administrative cases; average time/costs per case, number of appeals.
23. Yearly statistics about the inputs and outcomes of the total traffic enforcement chain should become available in integrated evaluative reports that contain some explanation of reliability of statistics and some interpretative comments on changes. On the national level, the different Ministries involved should co-operate in this evaluative effort.
24. The data of point systems and administrative legal systems should as standard be made available for scientific research, provided privacy rights are protected.
25. Countries where point system is under consideration should make provisions for the research needs that are necessary to evaluate the workings of the system.
26. A special European law should be introduced that permits the (small-scale) use of new legal or administrative enforcement measures or instruments for purposes of policy relevant field experiments.





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APPENDIX A: Traffic Law systems in Europe

APPENDIX B: Point systems and licence suspensions in Europe



# 1. Introduction

## 1.1 CONTENTS OF THE REPORT

This report addresses the question of how legal and administrative systems may support the operation or effectiveness of the total system of traffic law enforcement. In this first chapter we present road safety and traffic enforcement as the efforts of several inter-linked organisations and subsequently we discuss the possible meanings of the term “support” for police enforcement. Chapter 2 provides an introduction to the various links in the traffic law enforcement chain. In Chapter 3 we address issues concerning the effectiveness of different links in the legislative system to help traffic law enforcement. In Chapter 4 different forms of administrative support (administrative law, point system, licence revocation) for traffic law enforcement are discussed. A specific support for traffic law enforcement focuses on preventing recidivism. The special rehabilitation programs that have been developed for this purpose are discussed in Chapter 5. In Chapter 6 general conclusions are drawn and recommendations are offered for improving the system of traffic law enforcement.

## 1.2 GENERAL BACKGROUND

Road safety has never been the exclusive concern of the police. Police enforcement of traffic laws can only be effective if it operates in a supportive environment of laws, regulations, and a sensitive penal system. These combined forces act to create the deterrence effect of police enforcement, both on the individual level and on society at large (Hakkert, 1994). In the same way that the functioning of police enforcement depends on a supportive penal system, the penal system itself needs to be grounded in the moral convictions of the larger society. Ultimately, the process of deterrence can be traced to a great extent to the community and its moral and social values (e.g. Andenaes, 1977). To a certain extent this generally accepted system of values can be influenced by information and propaganda although social developments are to a large extent spontaneous and autonomous. Research has shown that a positive attitude towards a particular law greatly increases its observance. In other words: deterrence through laws, surveillance, and punishment are more effective the more public opinion agrees with them.

In our modern society we will increasingly find many organisations committed to or involved with road safety problems. Success or failure of an enforcement policy is not only determined by the internal functioning of the police organisation, but determined by the way in which different organisations, police, road authorities, publicity organisations etc. work together in a professional network and co-ordinate their activities. In this view, the quality of traffic law enforcement is determined by the extent to which activities are geared to each other to make up an effective chain of enforcement and supporting measures. In discussing the problem of road safety as joint responsibility of diverse organisations we may also add the critical note that the automotive industry has enormous potential to contribute to road safety by



manufacturing and marketing vehicles that operate more economically and at a lower speed level.

### **1.3 SUPPORT FOR POLICE ENFORCEMENT**

In a sense every measure that contributes to safe behaviour on the roads lessens the burden placed on traffic policing. From that perspective, any successful road safety measure may be viewed as a support system for police enforcement. In practice, road safety measures taken to improve road safety may at the same time both help and complicate the work of traffic law enforcement. Any legal road safety measure requires some additional (new) enforcement effort from the traffic police. Even though the measure may be quite successful in improving safety behaviour, at the same time traffic police may have to invest some extra resources into the enforcement of this measure resulting in less resources for other enforcement targets.

The concept of ‘support system’ may have manifold meanings depending upon one’s views about exactly what needs to be supported. The most direct answer seems to be that the effectiveness of police enforcement in deterring road users from committing traffic violations should be supported. In the Escape context an enforcement support system is described as a measure or a set of measures that is used by authorities or bodies in co-operation with authorities directly linked to traffic enforcement operations, to support police enforcement, including legal measures and adjudication. Support systems can be distinguished into three categories:

- Support systems that intend to improve the system by change of the design of the system by refining laws, penalties, procedures etc.
- Support systems that directly intend to improve the actual operation of the system (without changing the design).
- Support systems that intend to change how the operation of the system is perceived by the public and experts.

From Chapter 2 onwards, legal and administrative support systems will be discussed in the light of their respective purposes and potential benefits for various aspects of police enforcement and road safety.

The next chapter describes the total chain of traffic law enforcement. In subsequent paragraphs, the following links in the total enforcement chain will be discussed:

- legislation
- detection
- prosecution
- adjudication
- rehabilitation



## 2. The traffic law enforcement chain

### 2.1 INTRODUCTION

The legal system of traffic laws of a country form a complex system of interrelating components. First, traffic laws are heterogeneous in the sense that they may refer to different behavioural domains. The most common understanding of traffic laws is that they define the legal limits for road users' behaviour. One source of complexity is that there are different traffic laws for different groups of road users. Moreover, there are also laws and regulations relating to the competences and responsibilities of parties involved in detecting, prosecuting and sentencing offenders. To conclude there are law relating to parties involved in designing, building and monitoring roads and to parties. This deliverable will mainly be focused on the first two types mentioned.

Table 2.1 gives an overview of the main structure the traffic law (Goldenbeld, Jayet, Fuller and Mäkinen, 1999). Special attention is given to the distinction between criminal and civil law systems. In practice, in almost every European country the legal system for processing of traffic violations is always a mix of criminal and administrative procedures.

*Table 2.1. Ideal-type representation of global structure of legal systems*

Domain of law	Specification	Law system	
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The criminal or penal system usually follows three separate stages: detection, prosecution and sanctioning (Mäkinen, Jayet and Zaidel, 1999). Each stage passes through the hands of a specific competent body such that the sanctioning of an offence is linked by the police, public prosecutor and judge interventions up to the sentencing. In criminal law, usually a large range of penalties can be imposed, from the loss or restriction of liberty (prison penalty) or rights (driving licence), to financial penalties (day-fine, fine-unit, fines based on the offender's social status) or alternative solutions



such as community work (day-unit). Provisions of legal procedure are used for controlling the validity of the detection and prosecution stages.

In the administrative systems, the three sanction stages are combined into a single one, there is no prosecution, no judgement and the violation of a regulation is directly sanctioned (Mäkinen, Jayet and Zaidel, 1999). The administrative sanction cannot include liberty penalties but can apply the loss or restriction of rights (driving licence) and it mostly uses the financial penalty with fixed or unfixed amounts.

When the administrative legal systems support the action of traffic law enforcement, the responsibility for the whole enforcement process rests on the shoulders of the police bodies (even when the police do not receive the fine payment, and while an appeal in court is possible). Within the administrative frame, the traffic law systems win in autonomy while the role and power of police bodies are highly increased and decisive. Administrative systems bring together many aspects of the deterrence thinking of enforcement. The whole punishment process is condensed to the time of detection, with the subsequent time reduction in the process duration, the automatic application of sanction (under the restriction of police discretion or losses at the stage of fine payment).

## **2.2 LEGISLATION**

In traffic, as in other areas, laws (are intended to) regulate behaviour. The function of road traffic laws is to save lives and prevent suffering. Thus, they should be generally accepted by the public, provided that public is well informed about the beneficial effects of these laws and regulations. A road safety regulation is likely to be accepted if that law is generally considered to effectively reduce an unwarranted road safety risk against acceptable social and/or personal costs (Goldenbeld, 1996).

Whether road users choose to comply with or violate traffic rules depends on the benefits and disadvantages they associate with compliant behaviour. This process of choice, from a theoretical point of view, is often represented as a process of rational decision-making in which the pros and cons of behaviour and behavioural alternatives are weighted and summed and compared (e.g. Blomquist, 1986).

In practice, many choices will not conform to the criteria of the fully rational model. In traffic, as in other spheres of life, people tend to make shortcuts in mental functioning, relying on habits, on incomplete information, or on 'hunches', 'intuitive judgments' or 'mindless' imitation of other people's behaviour to make certain choices (Goldenbeld, 1996). It follows that failure to follow an existing or a new traffic regulation should not be automatically ascribed to indifference to the rule or to road safety. It may be that a rule does not agree easily with the information-processing capabilities or habits of road users.

The behavioural effectiveness of a law depends upon a number of factors. First, the law or rule and its associated meaning should be known to road users. Second, it is vital that, besides having an abstract or concrete knowledge of the laws, road users understand the importance of the law or rule for their own road safety or that of others.



For the knowledge aspect, it is important that the law should fulfil certain inherently correct qualifications, e.g. (Noordzij, 1976):

- the law is easy to understand for all road users;
- the law is easy to follow;
- the law is not in contradiction or conflict with other laws;
- the law is not in conflict with situational prerogatives;
- the law makes it easy to identify any violation of the law.

Road users tend to develop habitual behaviours that use a minimum of information processing time. Therefore, a rule should be easy to understand and give clear prescriptions for behaviour. A knowledge and understanding of the law should be accompanied by some notion of the intrinsic or communal value of the law or rules. That is, the road user should have a personal or social interest in displaying compliant behaviour. The one condition that is paramount in this respect is that the law has a clear relationship to road safety.

Both from a scientific point of view and from a drivers' subjective point of view, it would be ideal if it could be established exactly to what extent compliant behaviour contributes to road safety. Knowledge about the safety benefits of rules is important for several reasons. First, this knowledge can be used to convince the public of the importance of the law. Second, on the basis of this knowledge, an informed decision can be made about the level of secondary support for the law (publicity/enforcement/education). Third, this knowledge enables us to weigh the law in terms of costs/benefits and against possible alternatives.

## 2.3 DETECTION

The key principle underlying effective traffic law enforcement is a high level of perceived risk of detection, no matter what type of road behaviour is being targeted (e.g. Zaal, 1994). To achieve this, a number of enforcement strategies can be adopted:

- ensuring that police enforcement is combined with adequate publicity;
- highly visible police enforcement;
- an unpredictable pattern of random controls;
- selective controls at times and locations where there is a good chance of catching offenders and where traffic offences are known to be a causal factor in accidents;
- controls which are difficult to avoid;
- continuous enforcement.

It is important to obtain an effective mix of these strategies (Goldenbeld, Jayet, Fuller and Mäkinen, 1999). If publicity is not followed up quickly with police enforcement in practice, the effect will be counterproductive. Public information campaigns lose their credibility if road-users do not register increased police surveillance through experience. Highly visible road checks, that only apprehend a small number of offenders, are mainly useful in alerting a wider public to increased vigilance, and should be supplemented by controls with a better chance of apprehending offenders. Finally, the police will need to continue these enforcement efforts for some years if they are to effect a permanent



change of behaviour among road users. A degree of moderate enforcement will therefore be required once the period of intensive surveillance has come to an end.

## 2.4 PROSECUTION

Prosecution is the act of instituting legal proceedings against a suspected traffic offender. The prosecution procedure should ensure that the evidence against the suspected offender satisfies legal requirements and ensure that the suspected offender is notified of the proceedings or the sanction and the possibility to lodge an appeal.

Essentially, the quality of the prosecution process can be summarised in three key characteristics (e.g. Ross, 1990): efficiency, swiftness and fairness. Efficient would mean that the prosecution proceedings would take as little as time possible from the courts, justice officers, judges, suspects while at the same time maintaining the soundness of the procedure. The lapse of time between initial notification of a violation and the sanction is important from a psychological point of view. The theory of deterrence assumes that punishment is more effective in changing behaviour when the punishment follows swiftly upon the behaviour that is in violation. Experiments performed to test psychological learning and conditioning theories have amply demonstrated this point (e.g. Skinner, 1988). The fairness of the procedure relates to the question whether the evidence is collected in a legally pre-scribed manner, whether the suspect has been duly notified of possibilities to lodge an appeal and whether mitigating circumstances may be brought to bear upon the case.

## 2.5 ADJUDICATION

Adjudication refers to the process whereby a sanction is imposed upon the apprehended offender. As a part of the legal system adjudication has both a general deterrence and a specific deterrence function. Specific deterrence can be seen as the impact of actual legal punishment on those who have been apprehended (Armour, 1984).

Once a traffic offender has been apprehended, a number of different legal sanctions can be applied: monetary fines, penalty points, temporary driving ban, rehabilitation programs, license withdrawal, prison sentence. Road users have formed, in the course of time, an incomplete picture of the various aspects of this system and their interactions. This refers not only to estimates of getting caught and punished, but also opinions about the attitude of police and the extent to which they can be influenced, opinions about the certainty of punishment when caught, and opinions about the justification of the system etc.

The fear for legal sanctions is supposed to be the core mechanism that explains the deterrent effect. Apart from increasing fear, Gibbs (1975) argues that there are many alternative ways in which legal sanctions can prevent law breaking. He lists the following nine alternative mechanisms:

1. Isolation of law breakers from social contact ('incapacitation');
2. Increased surveillance via rehabilitation ('punitive deterrence');



3. Actual punishment leads to a greater public knowledge of the law and its punishments ('enculturation');
4. Personal conversion through the shock of punishment ('reformation');
5. Exercising legal punishments strengthens the social disapproval of an act ('normative validation');
6. Exercising legal punishments discourages taking vengeance by the victim or family of the victim ('retribution');
7. The anticipation of the social stigma that accompanies punishment can deter the citizen more than the punishment itself ('stigmatization');
8. Isolating law breakers from others ensures that the law breakers cannot bend the attitudes and values of others in an unwanted direction ('normative insulation');
9. Obeying a law originally out of fear can eventually lead to it becoming normal ('habituation').

## 2.6 REHABILITATION

Rehabilitation systems have been developed to counteract high risk driving especially target drunk driving, partly also excessive speeding and reckless driving. As we will see in chapter 5, rehabilitation programs can be successful in lowering recidivism rates. Clearly, rehabilitation programs should be considered as an intervention aimed at behavioural causes of violations rather than as punishment or punitive sanction. Theoretically speaking, the success of this intervention in lowering recidivism rates cannot be explained by deterrence processes, but is based on more general psychological influence processes. Deterrence theory has been used by many authors as a general framework for explaining the effects of police enforcement and sanctions. However, the framework does not cover all influence or change processes that are at work in the field of traffic safety.

The degree of development of rehabilitation systems and the ways of implementation vary a lot among European countries. Many European have not implemented rehabilitation system at all, in several countries experiments are conducted or some authorities or courts have the option to impose rehabilitation measures. In Europe two countries, Germany and Austria, have embedded rehabilitation measures in their legislation and have made rehabilitation part of the whole licensing system.

Since rehabilitation programs aim to prevent offenders from recidivism, these programs become more reasonable and successful if they are part of a whole system of measures. Licensing systems are characterised more and more by a combination of education and enforcement strategies (graduated licensing systems, combination of probationary and provisional systems) (e.g. Siegrist, 1999).



## 3. Legal systems

### 3.1 INTRODUCTION

A legal system or processes as described in chapter 2 cannot be considered as a static situation. European traffic law enforcement systems have evolved in time in very different national contexts that differ in constitutional aspects, in size and density of the transport system, in the organisation and responsibilities of police forces and local government, and in many other attributes. Even within countries there are differences in the way enforcement is applied. The GADGET report (1999) provides an extensive description of legal systems in many European countries. To get an indication of the patchwork of legal and administrative systems applied throughout European and possibly compare them in terms of advantages and disadvantages, a succinct description of different systems is given in appendix A.

As demonstrated by the GADGET WP5-review (Goldenbeld, Jayet, Fuller and Mäkinen, 1999) and in the overview presented in Appendix A, traffic law in most EU countries is part of the criminal law (although Israël is not a European country, Israeli data were included for the sake of general interest). While this seems appropriate in view of the serious consequences which violations of traffic law may have in terms of injury and death, it does pose severe constraints on the evidentiary and judiciary procedures. Evidentiary requirements, paper work and court appearances take away a considerable share of time of the police officers which might be dedicated to direct field enforcement. Conversely, judiciary procedures can allow those suspected extensive appeal procedures that may take years and frequently put a disproportionate effort on the police and courts. While this may be appropriate for exceptionally serious traffic offences or crimes, it is hardly possible to process the myriad of minor violations without making a devastating demand on policing manpower or clogging the court procedures.

For this reason, several EU countries have experimented with and, in part, implemented laws that allow traffic regulation infringements to be treated under civil law with the accompanying simplification of procedures and possibilities of appeal. In the first instance, this has been applied to parking violations (and road taxes) but it is now being extended to all traffic violations that are committed on a regular basis (i.e. not causing accidents/ injuries).

It can be clearly seen from the descriptive examples and the succinct descriptions in appendix A that, even in countries in which traffic legislation is part criminal law, there is a tendency to move towards a simplified system of using sanctions. This is mainly due to two facts. First, the vast size of transportation systems makes traffic violations "bulk offences", that no system can handle efficiently in case a strictly criminal type of approach is applied. Second, automated enforcement methods make it possible to generate a huge number of cases that would suffocate courts in case the approach would be that of a purely criminal system including summons to court. A clear indication of attempts to have a control over a great number of violations within a criminal-



administrative systems is the use of de-merit point systems. In addition to that, most countries apply fixed fines, and in many cases they can be settled on the spot.

Even though there is some development and change in legal systems, it should be observed that the legal system lags several steps behind the fast technological developments that would enable implementation of new road safety measures. Legal systems face new challenges when technology will be used more extensively as supporting enforcement or as a part of enforcement systems. For example, automated detection of speeding and other violations still creates a bottleneck in several countries, since the issue of owner liability has not been satisfactorily solved preventing the development of truly automated systems. Another example is that the use of alcohol interlock-systems requires legislative changes to even make the installation and experimentation possible. This issue needs to be urgently addressed when more in-vehicle safety systems are entering the market.

### **3.2 DETERRENT EFFECTIVENESS OF OBJECTIVE DETECTION**

The main objective of traffic law enforcement is road safety – achieved by deterring road users from committing offences which are related to road crashes and injuries. It is not to maximise the number of tickets issued. Many enforcement activities are still too often directed towards detecting and apprehending the offending driver. Police activities should primarily serve as deterrence for drivers inclined to commit traffic offences through increasing road users' perception of the risk of being caught (ETSC, 1999).

There is no simple linear relationship between objective detection and perceived level of detection. An increase in the level of objective detection will not automatically result in an proportional increase in the perceived subjective risk. In general, with increased experience road users will tend to guess the chance of getting caught from own experience along the roads, from hearsay and of course, from publicity about enforcement activities. Automated enforcement is applied in several countries by creating the deterrence by means of high subjective risk of detection as much as by means of high objective risk of detection. This is achieved by informing the drivers of the surveillance area through information boards alongside the road. This practise is applied in Austria, Denmark, Finland, Netherlands, Sweden and UK in Europe. It is obvious that this leads to a lower number of ticketed drivers than keeping drivers uninformed. Also the method has increased the acceptance towards automated methods.

However, to create some minimum level of general deterrence it would be necessary to have objective detection levels for certain offences that are not too low. For instance, it may be considered to check, on average:

- a) monthly 1 out of every 2 to 3 drivers on speeding;
- b) yearly, 1 out of every 8 to 10 drivers for drink-driving;
- c) yearly, 1 out of every 12 to 15 drivers on the use of seat belts;

These detection levels are quite modest compared to the high detection levels in some Australian states. For example to create a general deterrent effect in the area of drink-driving it has been recommended to increase the perceived probability of detection



(ETSC, 1999): at least one in ten drivers every year, one in three drivers if possible. This can only be achieved through wide-scale application of Random Breath Testing and Evidential Breath Testing. When interpreting results, programme designers agree on the fact that RBT works if it is associated with the perceived probability of detection. This is the case if random breath testing is conducted at highly visible roadblocks, is unpredictable in location and gives the impression of ubiquity (Homel, 1993).

In the near future automatisisation will increase efficiency of enforcement of speeding by sharply increasing the probability of detection of violations and by increasing the amount or relevance of the information or feedback provided to the road user (Rothengatter, 1991a). In the areas of speeding and red-light negation camera-technology can be put into operation to increase the efficiency of detection of speeding, such as using automatic enforcement, avoiding the need to stop speeding drivers on the road. Stopping speeding vehicles needs a disproportionately large input of manpower. Moreover, for practical reasons stopping of offenders cannot be easily done on many road types. Use of a camera will result in a very much larger output of enforced vehicles. In the future, telematics can impose speed limits through intelligent speed adaptation systems.

In the future automatisisation of one or more steps in the total enforcement process will evolve. Besides increasing the objective detection levels, automatic systems can increase the fairness or objectivity of enforcement by delivering clear end definite proof of the offence being committed. Basically, the possibilities of automatisisation of enforcement can be divided into three categories: on-site registration and information systems, in-car information systems and registration systems. In WP... more attention is given to the potential of new technologies to increase detection potential for various offences

### **3.3 DETERRENT EFFECTIVENESS OF LEGAL SANCTIONS**

#### *Effects of sanctions*

Once a traffic offender has been apprehended, a number of different legal sanctions can be applied. Fixed amount fines are the most common type of traffic offence penalty and can be an effective and efficient form of legal sanction. The deterrent effectiveness of increased fine amounts are, to a large degree, dependent on the road users perception regarding the risk of apprehension (Stafford et al., 1986).

There are no indications that, if the probability of being apprehended is reasonably small and remains static, a penalty increase will have a deterrent effect. A more severe legal penalty could have a stronger inhibitory effect if it is combined with a reasonably large subjective risk of being apprehended. However, offences which are outside the driver's control, due to a lack of experience or loss of function for example, will not be reduced by more severe legal penalties. However, often substantial increases in fine amount are not viable within the context of an existing legal system.

It is anticipated that a more severe penalty will be less effective in reducing offences the more transgressors:



primarily offend as a result of personal restrictions, such as lack of experience, loss of function etc. ;

have experienced they were not penalised for offending against the traffic code;

do not adhere to personal standards which condemn offences;

are not exposed to public standards which condemn offences.

Furthermore, an increase in severity of the punishment could actually have a negative effect (Twisk and Wittink, 1994). Although it cannot be certain in advance which side effects will result, the following responses may be anticipated:

A relatively heavy punishment, such as a (temporary) retraction of the driving license, can lose its inhibitory effect if it becomes apparent that in practice one can still drive with an invalid driving license without fear of being apprehended;

A penalty can also be so severe that offenders will go to extreme lengths to avoid punishment. This leads very likely to an increase of offences such as ignoring stop signals by police, and not stopping after an accident.

However, there is some evidence that specific types of penalties may be very effective in influencing behaviour. Especially licence suspension has been shown to be an effective countermeasure against repeat offenders and those road users who violate more serious traffic laws (e.g. Zaal, 1994; p. 25). The success of license suspension as an enforcement countermeasure is primarily due to the restrictions it places on the offender's mobility and the subsequent changes it causes in their lifestyle. Furthermore, even if suspensions are violated by a number of drivers, it is plausible that these suspended drivers would put in extra effort to adhere to traffic law in order to reduce the chances of detection. In the next paragraph we describe license withdrawal in European context.

Until now we have discussed effects of sanctions without paying attention to the actual process of sentencing. Study of the process of sentencing itself is worthwhile since it may give us an understanding of the actual operation of the judicial system as compared to its theoretical design.

### *Sentencing practices*

Corbett et al (1998) studied in detail the court's practice as to sentencing speeding drivers. As noted, with the introduction of automatic speed cameras in 1992-93, it was expected that many more cases than before would be prosecuted by way of fixed penalty and summons. In addition, because the cameras produce photographic evidence, there was a strong likelihood of a higher rate of guilty pleas. As courts were faced with pressure to turn around cases as fast as possible following the introduction in April 1992 of cash limited budgets, the charges referred to above turned speed motorists into particularly good news for courts. A group of magistrates and Justice's Clerks were interviewed about their courts' sentencing policies and practices for high speeding drivers. As it turned out, in most courts, most speeding motorists (less serious cases) plead guilty and are sentenced in their absence. The remaining high speed drivers appear in court either because they have pleaded not guilty, or because they are



summoned on account of “totting up”, or because the offence is sufficiently serious for disqualification to be considered.

A number of magistrates, clerks and police held the view that “it is Mr Average motorist who get it in the neck, while the real baddies get away”. It was suggested that more use of the fixed penalty system would relieve pressure on the courts. This would be another step towards decriminalisation of speeding by removing the “worst” offender from the public area.

If a fine is to be imposed, the offender’s means are taken into account, whereas a guilty plea attracts a discount, and previous convictions and offending may be considered as aggravating factors. There are pre-unit fine guidelines, however, the interviewees showed little consensus within or between courts, as to the level of fine for each mile per hour over the limit. In deciding whether to disqualify, factors taken into account are weather, time of day, type and condition of road and previous speed convictions (broad agreement between magistrates). As to the driver’s age and employment status, these could be mitigating or aggravating factors, depending on who was making an assessment.

In general, the legal system looks like having many internal discrepancies, mostly stemming from the fact that speeding violations are considered as criminal: for example, a fair number of magistrates pointed out that it is often the case that real criminals fined for indictable offences receive lower fines than many motoring offenders who are not considered to be “real criminals” at all. There is inconsistency in the vision of enforcement purposes by the police and by courts. Practice of judging speeding cases accepted by the courts seems to be quite different from the police expectations.

Also, a recent report by Her Majesty’s Inspector of Constabulary (HMIC, 1998) drew attention to a lack of awareness among magistrates of the links between casualty reductions and the penalties they imposed, particular with respect to the deterrent effect. This is not surprising because, as to magistrates’ training, the Magistrates’ Association indicated that only one and a half hours of training in road traffic matters (out of ten hours of introductory training plus six hours of observation in courts) is achieved before magistrates first adopt their official duties. This is clearly not sufficient to achieve more than a basic understanding of issues associated with road traffic law offending.

Overall, since the beginning of the nineties there is a decreasing trend in the number of offences acted on by the police, the number of court proceedings and the number of findings of guilt. PACTS (1999) raises several possible explanations for the phenomenon but cannot admit that the quality of driving has improved dramatically over the past ten years. A reduction in the scale of road traffic law enforcement effort was identified but, also, there were a number of questions as to the quality of judging, especially with regard to bad driving offences.

In the light of the foregoing analysis it is well-advised to repeat the recommendation of the 1999 ETSC report on traffic law enforcement: It is recommended that one seeks for explicit agreements between the various actors (legislators, police, prosecuting bodies) about the consequences that follow detection of offenders.



There is a growing recognition that the standard response of fining the offender may not be optimal. In some EU countries (most notably in Germany) elaborate systems are being developed to correct offending drivers rather than punishing them. Elements of such schemes are provisional licensing for young drivers, driver improvement and remedial courses for offending drivers and demerit point systems. While such schemes have had notable specific deterrent effects on for example the recidivism of alcohol-involved drivers, the main issues to be addressed are how such schemes can be incorporated in the traffic regulation enforcement strategies and judiciary procedures.

### 3.4 DETERRENT EFFECTIVENESS OF THREAT OF LICENSE WITDRAWAL

Very likely the strongest deterrent effect of police enforcement may result from public perception of the likelihood that an accumulation of traffic violations results in a withdrawal of the licence. Almost all European countries have some legal provision that allows for licence suspension when the speed limit has been grossly exceeded. A notable exception is *Poland*. In *France, Hungary, Slovakia, Sweden, Switzerland* and *Czech Republic* it is possible to have the licence suspended for violations between 20 and 31 km/hrs. Similarly, most countries allow for licence suspension in the case of driving while over the alcohol limit.

#### Descriptive example

In *Finland*, roughly about 50 % of drunk drivers are recurrent drunk drivers; so they are caught for a second time at the minimum (cases of more 100 arrests have been recorded) or they have a drinking problem. For this reason and due the EU-directive 91/439/ETY the police is entitled to require a proof from the driver who has been arrested for drunken driving or driving under the influence of narcotic drugs or has been arrested from drunkenness in a public place (several times) that he is not any more dependant on alcohol or drugs. This means that the driver has to provide the police with a doctor's (specialised in alcoholism and drug treatment) statement that he is no more dependant on alcohol or drugs to get a licence or to renew it. The rules are as follows:

*The driver having a short-term driving licence:*

If he/she has been arrested once for drunken driving (so after the first arrest) a doctor's (a specialist in alcohol and drugs) statement is needed that the driver is not dependant on alcohol or drugs for the driver to renew (getting back) the licence he lost due to drink driving.

If he/she has been arrested in the course of the past year at least twice during a six months period for public drunkenness (so not driving but being "too" drunk on a public place) again the doctor's statement is needed for keeping the licence.

If the driver can be generally assessed of being an abuser of alcohol or using narcotic drugs so that she can be regarded a traffic risk at the wheel, a driving ban can be imposed on him. Again, to regain his licence he has to prove the ability to drive a car safely through a statement issued by a medical doctor specialized in alcohol and drugs.



### *The driver having a regular licence:*

After having been arrested for the second time for drunk driving in course of three years a medical doctor's (specialist) statement is needed for the driver to renew his licence after the driving ban is over.

If the driver has been caught (at any occasion on foot or else) under the influence of narcotic drugs, the statement is also needed for the driver to regain or to keep his licence.

If he/she has been arrested in the course of the past year at least three times during a six months period for public drunkenness (so, not driving but being "too" drunk on a public place) again the doctor's statement is needed for keeping the licence.

If the driver can be generally assessed of being an abuser of alcohol or using narcotic drugs so that he can be regarded a traffic risk at the wheel, a driving ban can be imposed on him. Again, to regain him licence she has to prove the ability to drive a car safely through a statement issued by a medical doctor specialized in alcohol and drugs.

Vehicle Administration is responsible for licence maintenance and is also informing the licence holder of the status of his licence and the steps necessary to renew or regain the licence. There is no specific information about the costs but as an ADP-based system it is not very expensive. In principle, the system seems a good approach since it aims at controlling the use of alcohol of those caught for DWI. It is also a selective system giving the right to drive to those people who obviously have changed their drinking habits. The expected effects of the system are positive but no good follow-up studies are in progress.

## **3.5 EFFICIENCY: DEVELOPMENT TOWARDS ADMINISTRATIVE PROCEDURES**

In some countries, e.g. Great Britain and Israel, where most road offences (except for parking violations) remain part of the criminal code, there are procedures, which allow part of them to be treated in a mostly administrative way. Such is the practice in Great Britain with the Fixed Penalty Notices given to violators of automatic speed and red light cameras.

Under British law, all road traffic violations are criminal offences and normally dealt with by the criminal courts. The courts have long had powers to disqualify drivers - ordering them to surrender their driving licences and preventing them from obtaining a new one for a period of time. Describing the British penalty system, Openshaw (1997) subdivides road traffic offences into three types: A - very serious offences (e.g. driving with excess alcohol) where almost always, the offender will be disqualified for at least 12 months even on the first occasion; B - fairly serious offences (e.g. exceeding the speed limit) where the offender will not normally be disqualified for a single offence (though this may happen) but the details of the offence will be on the licence so that it



may eventually lead to disqualification; C - minor offences (e.g. illegal parking), which are not endorsed on the licence and do not count towards a disqualification.

The Transport Act 1981 recommended that the system of fixed penalty payments, previously applying only to some Type C offences, should be extended to certain Type B offences, and this was introduced in 1986. The police may give a fixed penalty notice to the driver suspected of committing the offence. A driver who does not want to plead his innocence in a court simply pays a standard fine to a court official ("the fixed penalty clerk"). (In Britain the police are not allowed to accept fines directly from drivers). Since 1992, fixed penalty notices may also be sent by post to the registered keeper of the vehicle, mainly where offences are detected by automatic cameras.

When a fixed penalty is paid, the fixed penalty clerk endorses the licence with details of the offence and penalty points. Where the legislation allows the courts to choose from a range of numbers (e.g. speeding, between 3 and 6 points) the fixed penalty clerk must always take the lowest number in the range (in fact, no more than 3 points can be given for any fixed penalty offence). If by adding the latest offence the number of penalty points would exceed 12 (excluding any more than 3 years old) the fixed penalty system cannot be used and the driver is prosecuted and faces disqualification by a court. So, with one exception (for novice drivers) a person cannot lose the right to drive simply through penalty points without first appearing before a court.

In general, following a detection, there are several options, especially for less serious offences (PACTS, 1999). Drivers may be given a verbal or written warning, a fixed penalty may be issued, drivers can be offered a retraining scheme in place of a summons to attend court to answer a charge, or they can be summonsed directly. If a fixed penalty notice is contested, the offence is transferred to the court process. In terms of recorded responses to motoring offence in England and Wales (Home Office, 1998), in 1996, there were more than 3.3 millions of fixed penalty notices (35% of the total), 2.3 millions Magistrates' court proceedings, 3.5 million penalty charge notices (issued by local authorities), 0.2 million written warnings and 0.2 million vehicle defect rectification scheme notices. Among fixed penalties, the major part (69%) was given for breaking rules of vehicle operations (e.g. loading/ noise/ parking offences) and 24% - for breaking rules of driving behaviour (e.g. speeding/ motorway offences).

The Road Traffic Act 1991 permitted the evidence from type-approved automatic devices to be used as the sole evidence that an offence had been committed (PACTS, 1999). This was supported by the ability to forward conditional offers of a fixed penalty to offenders by post. In practice, this has led to a rapidly increasing number of cameras for the enforcement of speed limits and traffic signals. The number of speeding and traffic light offences detected by automatic cameras has steadily increased since 1993 and approached 350,000 in 1997, which comprised 39% of all speeding offences and 22% of neglect of traffic direction offences (including red light running). The majority of these offences (78 percent in 1996) are dealt with by fixed penalty (UK-input, 1998).

As described by the UK-input (1998), details on an offence captured on camera are re-recorded on file and a Notice of Intended Prosecution (NIP) is sent out to the registered keeper of the vehicle, within 14 days of the commission of the offence. This is



accompanied by a statutory notice requiring the registered keeper to provide details of the driver at the relevant time. If the keeper replies within allotted 28 days period and identifies the driver, either a conditional offer of fixed penalty (COFR) or summons is issued to the offender. A summons is issued where the offence cannot be appropriately dealt with by fixed penalty (e.g. because the driver was exceeding the speed limit by an excessive amount). Conditional offers of fixed penalty are usually issued by police central ticket offices. If the fixed penalty is accepted by the offender, a payment of forty pounds (plus driving license) must be returned to the Fixed Penalty Office of the local magistrate's court, where a court official processes them as described above. As for the law regarding prosecution, a NIP must be served within 14 days of the incident. As with all traffic offences in the UK, a NIP is required for prosecution to proceed (if the driver is stopped at the scene, a verbal NIP is sufficient). To note, unpaid notices are automatically registered as fines without court appearance and subject to court collection procedure. The fine imposed is set at 50 per cent higher than the original fixed penalty.

At present, the limiting factor of increasing the camera throughput lies in insufficient resources for processing offence data. Although offence data can be collected automatically, the current administrative processes involve much paper work and are very resource -consuming. About two-thirds of these processing costs are met by the police and one-third by the courts. The major problem is that processing of camera evidence requires police intervention since speeding and traffic light offences are criminal. Implications of possible decriminalisation of these offences are under discussion (PACTS, 1999).

Much work has been done in Great Britain to improve the processing of road traffic offences by the courts. Both the police and the Crown Prosecution Service work to guidance contained in the "Driving Offences Charging Standard", agreed between the two parties in 1996. However, as noted (PACTS, 1999) police offices frequently have different views from magistrates over the most appropriate response to offences. For example, Corbett et al (1998) found that magistrates were more likely to opt for higher fines for high-level speeding on motorways, whereas police officers were more of the opinion that disqualification was warranted for the offence.

### **3.6 EFFICIENCY: ADMINISTRATIVE LAW AS COMPLEMENTARY SYSTEM**

The development of administrative procedures within a criminal law system can be taken one step further if the administrative procedures are part of a legal frame that is separate from the criminal law system. An example of this next step towards more administrative processing of traffic law offences can be found in the Netherlands.

In the Netherlands, the laws which contain most of the traffic regulations are the Road Traffic Law (WWV) and the Law Administrative Enforcement of Traffic Regulations (WAHV), commonly known as the Mulder law. The Mulder law contains appendices stipulating which traffic law violations are made punishable under this law and the fine is determined. The WWV is part of criminal law. It contains regulations based on the



principles of maintaining safety, traffic flow and confidence. The Mulder law is part of administrative law.

The WVV and Mulder law differ in their consequences when violations are registered on the basis of the licence plate number without stopping the offending driver. Under the WVV the owner of the vehicle is held to identify the offending driver. Failure to do so is a violation of the law. Under the Mulder law the owner of the vehicle is fined, unless he can prove through legal documentation that the vehicle was not in his possession, that the vehicle was stolen or that the vehicle was rented out. Identifying the driver of the vehicle at the time the offence was committed is not a ground for revoking the fine. This last difference is very relevant for traffic law enforcement. About 90% of all traffic violations and -crimes registered are processed under the Mulder law. For the Mulder cases, in practice only about 1 in 10 registered violations involve stopping the offending driver. Thus, the large majority of offences registered are processed on the ground of owner liability, against which under the Mulder law, no appeal can be made. Once the competent civil servant has established that an offence included in the appendices of the Mulder law has occurred, he completes a so-called “announcement of decision” describing the violation committed and the penalty incurred. The Prosecutor is charged with the collection of the penalty. This task is delegated to a specialized agency, the Central Judicial Collecting Agency (CJIB).

The introduction of the new administrative law enforcement system in the Netherlands led to a workload shift from the police and the offices of the prosecution of the county courts to the direction of the Central Judicial Collecting Agency, a division of the Public Prosecutors office. This has the advantage that traffic violations are no longer the task of the already overloaded divisions of the police and justice systems. To note, the implementation of parking taxation on paid parking has resulted in the fact that a substantial part of the light traffic violations (fifteen to twenty percent) are no longer dealt with by the police and justice institutions but by the local governments.

In paragraph 4.4 we present some evaluative findings concerning the effects of this complementary legislative system.

### **3.7 CONCLUSIONS**

The effects of sanctions on driver behaviour is an area in traffic safety research that is probably the most neglected issue even though the concept of deterrence is solely based on the negative consequences of misconduct. It is generally known that sanctions improve traffic law observance. However, there is hardly any empirical evidence on the effects of different qualities of punishments such as severity, type or delay of punishments on driving behaviour. Moreover, the sanction scales in terms of severity vary a lot in Europe and in many cases they are disproportionately high compared to conventional crimes. Also the opposite examples can be found.

On a European scale the different sanction systems create an impression of no logic in guiding drivers. This is an issue that needs to be addressed and explored for creating more uniform and more easily comprehensible sanctioning systems in Europe. In Britain we found some evidence for diverging perceptions of police and court officers about the



best sentencing practices. Such divergence of perceptions is less likely to occur in Germany where the demerit-point system is very standard and precise in relating the amount of punishment to the severity of the violation. With this last observation in mind, we formulate some recommendations that may have different relevance for European countries.

- As the evaluation of British sentencing practices has shown, notwithstanding the efforts to co-ordinate the police and court procedures under criminal law, the practice of judging traffic cases accepted by the courts appears to be quite different from police expectations
- If court officers, police officers and judges seem to differ in their expectations concerning prosecution and sentencing of traffic cases, then explicit agreement should be sought and established between the different parties (legislators, police, prosecuting bodies) about the consequences that follow detection.
- Under a criminal law system, it is advisable to carry out periodic surveys of judging practice, in order to ascertain the discrepancies between the police deterrence practice and actual punishment of violators
- If it is decided to introduce automatic enforcement under a criminal law system, then it should be seriously considered to support this type of enforcement by wide application of fixed penalty notices and special administrative procedures for their treatment.
- The administrative procedures under criminal law imposing fines can cover a significant part of traffic offences, however as the British experience shows, within the court system a lot of “loop-holes” may remain which enable serious offenders to avoid or, at least, to commute the punishment



## 4. Administrative support systems

### 4.1 INTRODUCTION

In the past two decades three main administrative developments can be distinguished that complemented or changed the operation of criminal systems:

- orientation towards administrative procedures of processing traffic law offences;
- introduction of point systems to support or facilitate adjudication;
- introduction of separate administrative (civil) frameworks for processing traffic law offences.

The application of a penalty point system became a well-established instrument within the past years to connect delinquent driving behaviour with appropriate sanctions. In a penalty point system traffic violations are, according to their severity, valued with a certain amount of demerit points. When a threshold is reached respectively exceeded within a specified time span, the punishment following is more severe than at the first offence. The implication is that in general all motorised traffic participants are subject to a penalty point system, but specifically multiple offenders are targeted by this measure.

In paragraph 4.2 we discuss the operation and effects of point systems. Paragraph 4.3 provides a more detailed description of the German penalty point systems.

Paragraph 4.4 provides evaluation results of the penalty points systems.

Paragraph 4.5 addresses the scarce evidence regarding the possible contribution of a separate administrative framework towards traffic law system.

The chapter is closed with conclusions and recommendation in paragraph 4.6.

### 4.2 PENALTY POINT SYSTEMS

A penalty point system generally serves the aim to enhance road traffic safety by the possibility to withdraw licenses of drivers who have proven to be unsuited for driving by committing repeated offences. On one hand the system is to guarantee a uniform treatment of multiple offenders. Additionally it is supposed that the staged severity of interventional means has a general preventive effect. By this the penalty point system also has an aspect of leniency to traffic participants who committed their first violation. Table B1 (Appendix B) summarises the information gathered on licence suspension and point systems in European countries. Most point- and licence withdrawal systems are embedded in the general legislative system and are not exclusively related to one specific offence area, e.g. speeding or alcohol. Therefore, no specific breakdown will be made for the various problem areas in this paragraph.

On a general level, four main aspects constitute the registration in a penalty point system (Schade, 1998): 1. a traffic rule, 2. a situation in which the traffic rule needs to



be obeyed, 3. a traffic participant breaking this rule and 4. the detection of the rule breaking behaviour by competent authorities.

In respect of the third aspect, the offending persons, effects of a penalty point system for three groups of traffic participants are to be distinguished (Zaal, 1994):

- The first group consists of traffic participants who generally obey traffic rules and breaking these rules is rather an exception. This group is confirmed by the penalty point system to keep up their, in general, rule conform behaviour.
- To the second group belong traffic participants who usually follow the traffic rules but despite commit traffic violations occasionally. Therefore they only have a few penalty points. For this group the effect of the point system lays in the intention to avoid a high amount of penalty points not to risk severe sanctions. Zaal (1994) supposes that this deterrence effect encourages compliant traffic behaviour.
- The third group finally covers traffic participants who frequently break traffic rules. Especially this group is concerned of the consequences of a penalty point system directly. The withdrawal of the driving license has been reality or is forthcoming for a part of this group. Frequently these persons exceed the maximum point limit several times before a behavioural change follows.

In addition to the above division by Zaal, it should be added that of course the group of drivers who obeys the rules, is indirectly confirmed in its behaviour by not being penalised.

The following countries apply point systems in regard to traffic violations: France, Germany, Greece, Italy, United Kingdom and Poland. Among this group, France and Poland were the latest to introduce such a system. France started a point system in July 1992 and Poland in June 1993. This paragraph provides some information about the rules of the point systems in different countries.

In France the accumulation of 12 points can lead to licence suspension. Points can be returned if a drivers drives for a period of three years without receiving additional points or if the driver participates in specific training. In Germany, the accumulation of 18 points in two years will lead to licence suspension. The number of points depends on specific violations (minimum 1, maximum 7). An extensive overview of the German point system is given in Appendix B. In Greece a licence withdrawal can be expected if 18 points are collected during a period of two years. In Italy two transgressions within two years may lead to licence withdrawal.

In the United Kingdom a licence will be suspended if the driver receives more than 12 points over a three year period. The points are flexible depending on violation, but the minimum for a speeding violation is three points.

In Poland there are flexible points for the 45 most important offences, ranging from 1 to 10 points. If 21 points are accumulated in one year, the driving exam must be passed again. If the driver fails the exam the licence is suspended. If there are less than 21 points after one year, all points are cancelled and the driver may drive into the new year with a green slate/a clean record.



In Finland, there is no point system as such, but a driver who receives more than 3 speeding tickets in 12 months or more than 4 in 24 months, will have his licence suspended. In Portugal there is no formal point system either, but something much resembling it. A driving licence may be withdrawn by court if a driver convicted three times for very serious or five times for serious offences in three years. To recover his or her driving licence the user must pass a new driving test.

To illustrate the general functioning of a demerit point system, the German penalty point system for multiple offenders is introduced in the following paragraph.

### **4.3 THE PENALTY POINT SYSTEM IN GERMANY**

The penalty point system in Germany is in power since 1st May 1974 and has been novelised on 1st January 1999. The new regulations have a stronger legally binding nature and simultaneously the preventive character is emphasised by implementing offers for violators to reduce their point score, i.e. the focus is shifted from a purely administrative instrument for sanctions to a system having the aim to foster self responsibility of traffic offenders who have the chance early to take countermeasures against a high point score and, connected with that, severe punishments (e.g. Jagow, 1998, 1999; Ziegert, 1999).

The penalty point system in Germany is a part of the Central Index of Traffic Offenders, the central body responsible for registering administrative offences of a specified severity and for criminal acts committed in conjunction with road traffic or the use of a motor vehicle. The Central Index of Traffic Offenders' primary task is to provide the relevant authorities with the factual material they require to take selective, interventional and corrective measures to guarantee road safety, i.e. it serves as an instrument to protect the general public of improper drivers. Besides serving as an information database, the purpose of the Central Index of Traffic Offenders is a general preventive effect: It is supposed that drivers behave to avoid entries in the register. Entries must be annulled after given periods have expired. According to the severity of the offence the annulment period is two, five or ten years. Information from the Central Index of Traffic Offenders is only given to bodies which are cited expressly in the German Road Traffic Act, e.g. courts and authorities for administrative measures.

The registration of offences in the Central Index of Traffic Offenders proceeds according to the penalty point system for multiple offenders. The penalty point scale for committing an administrative and/or criminal offence reaches from 1 to 7 points according to the offence severity. Table 4.1 gives some examples of offences and the connected amount of penalty points.



**Table 4.1: Examples of offences according to their punishment in the German penalty point system.**

<b>Offence (examples)</b>	<b>Penalty points</b>
Drunken stupor Leaving the scene of an accident unlawfully	7
Driving despite of a withdrawn license Misuse of number plates	6
(Every other criminal offence not valued with 6 or 7 points)	5
BAC of 8 mg/100 ml or more Exceeding the allowed speed limit by more than 40 km/h in urban areas or more than 50 km/h outside urban areas	4
Endangering vulnerable road users Ignoring a red-light	3
BAC of 5 mg/100 ml or more Endangering the following traffic while overtaking	2
(Every other infringement not valued with 2-4 points)	1

The renewed system is not only based on penalties but also lays an emphasis on the self-responsible enlistment of helpful interventional measures (driver improvement courses, psychological consultation) which are voluntary to a certain point. If an offender voluntarily enlists these offers, he receives a penalty point discount. Three interventional thresholds are laid down in the system at 8, 14 and 17 penalty points. Official interventions begin at a threshold of 8 penalty points: The driver is informed on his score and the possibility of voluntarily participating in a driver improvement course. When enlisting this possibility he receives a discount of 4 points (for a point score of 1 to 8) respectively 2 points (for a point score of 9 to 13). From 14 to 17 points a driver improvement course is obligatory and no discount can be received anymore. Additionally, the offender is informed on the possibility of a psychological consultation which is always rewarded by a discount of 2 penalty points (for a point score from 1 to 17). Reaching a total of 18 penalty points, the driving license is withdrawn. Table 4.2 shows the legal measures according to the different point thresholds (e.g. Jagow, 1998, 1999; Schäpe, 1999).



**Table 4.2: Interventions at different penalty point thresholds**

Official notification and demand when reaching the concerned threshold	Penalty point score	Voluntary offers for point reduction	
	1	Driver improvement course: 4 points reduction <sup>1</sup>	Psychological consultation: 2 points reduction <sup>1</sup>
	2		
	3		
	4		
	5		
	6		
	7		
Written notification of the point score	8	Driver improvement course: 2 points reduction <sup>1</sup>	
Written information on the possibility of voluntary participation in a driver improvement course	9		
	10		
	11		
	12		
13			
Demand for driver improvement course <sup>2</sup>	14		
Written information on the possibility of voluntary traffic psychological consultation and the withdrawal of the license at 18 points or more	15		
	16		
	17		
Withdrawal of license	18		

Of approximately 50 million driving license holders in Germany only about 12% (6.2 million persons) are registered in the Central Index of Traffic Offenders. Of these 12% only 0.3% (about 17,000 motorised drivers) reach 18 and more points (Jagow, 1998, 1999).

If an offence is to be annulled in the Central Index of Traffic Offenders, the penalty points for this offence are dropped as well, i.e. the total point score is reduced. If the driving license is withdrawn the entire penalty point score is deleted. It is not possible to have less than zero points, i.e. the collection of “bonus points” below that level (e.g. by voluntary participation in a driver improvement course) is excluded.

Jagow (1999) rejects the idea that a voluntary participation in driver improvement course without having any penalty points should lead to the possibility of gaining “bonus points”. Since one major goal of the penalty point system is the identification of drivers who are unsuited for driving it is a necessary precondition that a driver

<sup>1</sup> Point discount is possible only once in five years and to a minimum of zero points.

<sup>2</sup> Only written warning, if the offender participated in a driver improvement course within the last five years.



committed offences. Furthermore, the general preventive effect of the penalty point system would be undermined if a “bonus account” was possible as the system could be misunderstood in the way that the driver assumes to have a “free ticket” for a future offence.

The system described in table 4.2 is valid for all motorised traffic participants. For a novice driver within the probationary period, the penalty point system and a specific offence category system for novice drivers are applied side by side, i.e. novice drivers' offences are evaluated according to both systems. As interventions for probationary drivers are applied earlier than for experienced drivers, a specific measure catalogue exists for probationary drivers.

For novice drivers with a probationary driving license the criminal and administrative traffic violations recorded in the Central Index of Traffic Offenders are divided into two sections (A and B). The criterion for allocation to category A or B is the significance of the violation with regards to the efforts to prevent accidents. Category A contains more severe traffic violations (e.g. intimidation, ignoring a red-light) whereas category B includes less serious offences (e.g. operating a vehicle with defective tyres, parking unlawfully on motorways or expressways).

One violation of category A or two violations of category B within the probation period lead to administrative interventions: The driver has to participate in a driver improvement course and the probationary period is extended by two years to a total of four years. If the driver commits further offences, he receives a written warning and a psychological consultation is recommended within a two month period (rewarded with a penalty point discount of 2 point). Further offences and ignoring this recommendation lead to a license withdrawal connected with a three months waiting period until the license is issued anew. The withdrawal of a driving license within the probationary period effects a premature termination of the probationary period. In such cases, the issue of a new driving license also initiates a new period of probation, but only to the extent of the residual time not completed in the previous period of probation. If the driver still commits further offences, a medical-psychological investigation is ordered regularly. Accordingly the gravity interventions is, as in the regular penalty point system, staged in relation to the repetitiveness of offences. Table 4.3 gives an overview of the different interventional stages when committing offences within the probationary period.



**Table 4.3: Interventions for offences within the probationary period**

Offence	Measure
1 offence of category A or 2 offences of category B	Driver improvement course and Extension of probationary period for two years (together four years)
As above <u>and</u> after participation in a driver improvement course	Written warning and Recommendation of a psychological consultation within a two months period
As above <u>and</u> after the deadline of two months	Withdrawal of driving license and Three months waiting period
As above <u>and</u> after new issue of license	Regularly: medical-psychological investigation

The supposed general preventive effect of the German Central Index of Traffic Offenders and the included penalty point system, i.e. the awareness to be subject to a control system and the consequential following of traffic regulations, has not been evaluated in a differentiated study by now.

#### **4.4 EFFECTIVENESS OF PENALTY POINT SYSTEMS**

A demerit point system, increased penalties for recidivism, possibility of confiscating the car or withdrawal of the driving licence, etc. can be assumed to enlarge the effect of enforcement on speed behaviour (Oei, 1998). However, often no information is given in the literature regarding these aspects, making comparison between research results rather difficult. Therefore, hard, reliable scientific evidence for a strong deterrent effect of point systems in general is still not available.

Critics of penalty point systems refer especially to experiences with persons of the above mentioned third group (Zaal, 1994), the multiple offenders. It is stated that an actual deterrence effect of the point system is only achieved if a sufficient amount of points is already collected and thus the probability of a license withdrawal is an effective means of deterrence. An additional reproach is that the point system increases deviant behaviour since a relevant sanction only comes into power at a certain amount of demerit points, i.e. the system is supposed to be characterised by a stimulative nature (Zaal, 1994).

Despite of these objections some experiences underline the effectiveness of a penalty point system. For instance, Zaal (1994) reports about an evaluation study of the penalty point system of Victoria/Australia. The results of this investigation show a longer time span between the second and third registration than between the first and second registration in the penalty point index. Thus the deterrence effect becomes obvious with an increasing point score in form of a change in traffic behaviour. At last, it can be shown that only a minor percentage reaches the point threshold leading to a license withdrawal.

Additionally, there are penalty point systems (e.g. in Germany) leading to specific interventions and voluntary offers at different point thresholds to guarantee that the



driver himself can avoid a withdrawal of the license. Thus it is considered to be justified for the purpose of traffic safety to withdraw the license of drivers who despite these possibilities reach the upper point limit (Jagow, 1998, 1999).

From a theoretical viewpoint there are favourable arguments to be lenient with offenders in the beginning (e.g. Koßmann, 1996). Results of sociological studies on co-operative behaviour show that co-operation between two actors is increased when a unique uncooperative behaviour is not answered by a likewise uncooperative action (see also Axelrod, 1987; Taylor, 1987).

#### **4.5 ADMINISTRATIVE LAW AS SUPPORT FOR TRAFFIC LAW ENFORCEMENT**

What evidence is there that the change from criminal to civil law (“Mulder” Act) has actually benefited the process of traffic law enforcement in the Netherlands? Some researches have been done in the Netherlands. As indicated by the VERA-project (1999), one of the principle characteristics of administrative violations is that the penalty structure is usually clear. So, the “Mulder” Act determines a straightforward and rigid procedure to notify a violator and ask him to pay the penalties due. Failure to pay results in a second and ultimately a third notification, which increases the penalty due by 25% and then 50%. Failure to pay after receipt of the third notification results in a bailing order, confiscating the amount due from the violator’s personal bank account. The appeals are still possible, however, payment of any penalty is not suspended: all penalties must be paid in accordance with the time schedules but are refunded if the appeal proves successful.

A study of Onneweer (1997) considered the effects of the “Mulder” Act and parking tax system in the Netherlands. For this, Onneweer compared the public attitudes and behaviours demonstrated under the new law with those observed under the former criminal law enforcement. Four criteria were applied for the comparison: 1) payment of traffic fines, 2) making use of the legal protection systems by offenders, 3) traffic behaviour and 4) the acceptance of the new system of traffic law enforcement.

With regard to the payment of penalties for traffic offences, traffic violators were confronted with a number of changes under the new administrative regime. Reminders of payments are issued sooner, the actual time for payment has become shorter and already in a very short time the state can act towards reimbursement of costs and towards means of coercion. Furthermore, the percentage of non-reclaimable fines was reduced from fourteen to seven percent. Also, the actual possibility of former times that a violator did not have to pay due to non-acting on the fine (not paying and not protesting) was reduced to virtually nil. All this resulted in an actual attitude improvement towards paying the fines. The willingness to pay on the first notice increased from 76 percent to 85 percent.

In Dutch criminal law the case would appear in front of the judge automatically by non-acting of the fined person, whereas in administrative law within six weeks the fined person has to take initiative himself for law protection making use of the objection or



appeal procedure. Moreover, the appeal procedure is somewhat more cumbersome in that a written appeal is required that can be sent to the Officer of Justice only. Not surprisingly, it has been established that under the “Mulder” law people are less taken towards complaining than under the criminal law.

Regarding the possible deterrent effect of the new traffic law enforcement there has been no proof for an increase in general deterrence. Between 1991 and 1995 the attitudes of the Dutch public concerning traffic violations and traffic in general have remained unchanged. Despite the possible effects of rapidity and assurance of penalties on deterrence, the non-occurrence of a larger deterrent effect of the “Mulder” law very likely is to be ascribed to the exceptional small chance to be caught for a traffic violation: on estimation, at the utmost, one in three thousand Dutch offenders is caught. The only category of traffic violations in which, since the seventies, there is a relatively high chance to be caught at – in 1995 around one percent – is a parking violation. The enforcement of parking violations seemed to have a larger impact on the attitude of traffic participants than traffic enforcement in general.

An important indicator of the public acceptance of the new administrative system is the willingness to pay the tickets without delay or lodging appeals. A large majority of drivers pays fines without causing any difficulties or going to court. For instance, in 1995, 85% of all drivers, who received a fine, paid immediately. After receiving two admonitions this percentage was 95.5% (that is, 95.5% of all drivers, who received a fine, paid immediately or after having received one or two admonitions).

In general, it was concluded (Onneweer, 1997) that a large majority of the Dutch public did not seem to have any difficulty with what amounted to a tougher policy for offenders who do not pay their fines. Most Dutch people think it an improvement in comparison with the old situation, and pay their fines on time. The fact that it is not made easy for offenders who do not pay, very likely appeals to this majority group. Also, the public does not mind that if people do not agree with the fine, they have to take action themselves through the introduction of an objection and appeal.

## **4.6 CONCLUSIONS**

Again, even after the present review and the additional information collected for the participating countries, on the basis of the available evidence, the overall conclusion remains that at present it is not possible to show in quantitative terms how point systems support police enforcement.

The experiences with administrative law in the Netherlands have shown that it is possible to introduce an administrative law that increases detection capacity, reduces the work load of courts and police, makes swift punishment more likely, and at the same time introduces a tougher policy for non paying offenders. However, the main argument to introduce the administrative law resided in the wish to decrease the workload of courts and police in handling traffic cases. Undoubtedly, in many European countries there is no actual problem of the courts and police being overloaded with traffic cases. In those cases, there is simply no particular cause to insert administrative procedures or to create a separate administrative law frame. In the near future, the increased detection



capacity brought on by modern technology, might change the way the traffic law enforcement system is perceived within these countries.

In the light of the above, we formulate the following conclusions with some caution:

- One way to reduce overload of the police and justice systems is to allow more traffic regulation infringements to be treated under administrative law. Another way is to increase the efficiency of existent court procedures.
- The introduction of administrative traffic law enforcement systems permits the processing of offences to be performed by a third, civil body and thus, results in a reduction in overload of both police and justice systems, which, in turn, increases their efficacy.
- When strict and well-balanced procedures are applied for processing traffic violations (under administrative law), high levels of payment of traffic fines are attained, along with overall acceptance of the traffic law enforcement system.



## 5. Rehabilitation measures

### 5.1 INTRODUCTION

Rehabilitation systems have been developed to counteract high risk driving and target especially drunk driving, partly also excessive speeding and reckless driving. The degree in development of such systems and the ways of implementation vary a lot among European countries. In many countries such systems are not in use at all, in several countries experiments are conducted or some authorities or courts have the option to impose rehabilitation measures. Germany and Austria, however, have embedded rehabilitation measures on clear legal basis in their legislation and made rehabilitation part of the whole licensing system.

Since rehabilitation programs aim to prevent from recidivism, these programs become more reasonable and successful if they are part of a whole system of measures. Licensing systems are characterised more and more by a combination of education and enforcement strategies (graduated licensing systems, combination of probationary and provisional systems).

Alcohol offenders - as those with high recidivism rates and those with high accident risk - where the first to be subject to rehabilitation programs. As a consequence of success in this field rehabilitation measures have been introduced for another high risk group – the novice drivers.

Any enforcement strategies targeting on alcohol, excessive speeding, but also targeting novice drivers should therefore be designed with respect to accompanying rehabilitation measures.

The implementation of rehabilitation programs may not only have an effect on the single offender who is imposed to undergo a rehabilitation measure. If rehabilitation programs are known to the public – which is the case in countries where measures are part of the licensing system – rehabilitation programs achieve a general preventive effect. The obligation to undergo a rehabilitation measure is another quality of a consequence of a traffic offence which many drivers try to avoid.

Rehabilitation programs introduce a new quality into the enforcement and licensing system. In contrast to formal rules setting thresholds for fining and license suspension, rehabilitation programs address the individual driver. Assumptions on underlying reasons for the offence (or repeated offences) constitute the quality and way of intervention.

Rehabilitation measures so far concern medical interventions (especially if addiction is assumed or proved to be a reason for offences), social activities (services in hospitals where accident victims are cured), additional driver training and psychological measures. There is little reported on the effects of social activities, anyway, the underlying assumption is that the driver might start reflection on his behaviour and thus modify some of his habits. Additional driver training is based on the assumption that



skill and knowledge deficits might be reasons for traffic offences. There is no consistent support for these assumptions and discussion is moving towards the question in which cases this approach might be appropriate (among other issues the DAN project deals with the question whether such measures are appropriate for novice drivers). Psychological measures are based on the assumption that mental issues are often the reason for traffic offences and accidents. Thus inappropriate attitudes are an important issue, as well as principles of learning and reasoning (often wrong conclusions are drawn from own experiences) principles of behaviour acquisition and behaviour adaptation, ways to change undesired habits, but also questions of life style. In fact psychological measures seem to be those measures which are applied most and which also have been investigated most.

Particularly in the field of rehabilitation of drinking-and-driving offenders, a lot of experience has been gained. In this paragraph some of the main lessons from the project GADGET, in which this field was studied, will be summed up.

Up to now, the evaluation of Driver Improvement (DI) measures to change delinquent behaviour and attitudes, using an epidemiological assessment model, has not yielded unambiguous and unanimous results. It must be stated that due to the ways systems become implemented, optimal research designs for evaluating the effects are never given. It is almost impossible to isolate the effects of single determinants of the systems.

However, significant changes have been reported in statistics concerning education and public health models. DI research provides references for optimising programmes and their assessments with a view to improved road safety:

a) There is a need to consider DI as a dynamic and progressive system embodying procedures of correction and self-correction. DI should be optimised by means of:

an in-depth analysis of the intermediary processes for making diagnoses and assigning drivers to appropriate, tailor-made programmes.

development of an iterative approach to maximise the ability of DI measures to cater for the needs of drivers.

This can only be done through strict research assessment that allows the best adaptation of a programme to drivers' particular sets of problems. All DI measures should be conceived as models that include interview techniques, group techniques circumscribed by penalties, with each measure having its function and role at a given moment and for a given set of infringement problems.

b) There is a need to refer to psychological theories about changing attitudes and behaviour for determining objectives that can be measured, identified and controlled. Efficient programmes are based on conceptual fields and the application of the main currents of psychology (especially for alcohol-related offences). However, there is no single dominant approach: research has engendered some certainties, but the field still remains to be explored and more and more experiments are being conducted.



c) There is a need to ensure that DI programmes are high level. The "Driver Improvement Workshops" of 1993 in Switzerland and in Germany (BAST, 1998) underlined the need to intensify and co-ordinate three levels:

- feeding into DI programmes the results of research on road safety and psychological theories on behavioural change and evaluative theories,
- creating a structured organisation and legal basis for courses
- training and monitoring the moderators.

According to some authors, this guarantee of training quality, recruitment for diagnostic purposes and DI should be provided with a legal basis at the European level.

d) There is a need to view DI as a systemic approach. This North-American viewpoint is largely shared by German speaking countries, which do not focus their efforts solely on a high-risk group but position infringement prevention in a broader system of preventive measures that include legislation and regulation (alcohol level, speed limits, control-penalty system, driver training, general road safety education and public information campaigns) (Huguenin, 1979 ; Kroj, 1981). The penalty-education relationship is not meant in terms of exclusion but in terms of complementarity, and preventive measures, both general and punitive, should be and can be better exploited.

e) Further research and broader applications would be useful for compiling data and files on offenders and data on young victims of the road ( care, therapies, specific training of moderators etc) and enable comparisons between the countries to be made, the general aim being to assess different DI models.“

In several EU-countries, rehabilitation programmes supportive to police enforcement are applied. In the next paragraphs an overview is given of the experiences with these systems in different problem areas and countries. However, in general it should be stressed that rehabilitation systems cannot be assessed without considering the process of legislation, enforcement and rehabilitation as a whole. For instance, success at the level of the individual driver largely depends on the fact whether he/she has been subject to an appropriate measure. A critical issue thus is the validity and reliability of the procedure which decides if and to what kind of specific measure the offender will be assigned to. Court decisions or some routine measures will be less powerful in this respect compared to medical and psychological tests which have been developed for this purpose.

## **5.2 REHABILITATION MEASURES IN THE FIELD OF ALCOHOL**

It is important to consider that alcohol offences may be a result of various reasons and that the rehabilitation measure has to reflect that. The classification into “drinking drivers” and “driving drunkards” is a simple and instructive criterion (e.g. Stephan, 1997a, b).



If an addiction problem is the underlying reason abstinence from alcohol is the most important criterion for reissue of the license. In this case the attitude to alcohol in general is crucial and issues like correct assessment of alcohol risk in traffic etc. become secondary issues. From this point of view the way alcohol offenders are treated in the Finnish licensing system (see previous chapter) can be seen as a rehabilitation system.

In many cases (and this also has to do with the drinking culture, which is very heterogeneous in Europe – SARTRE), however, drinking and driving may be a result of wrong assessment of alcohol risk and thoughtless drinking habits. Driver improvement programs often address this very group of offenders.

In the Netherlands, on June 1st 1996 a new legal measure was adopted in the to give alcohol-offenders the opportunity to choose between traditional punishment (fine or invalidation of licence) or attending a educational course on the risks of drinking-and-driving. The Educative Measure for Alcohol offences (EMA) course is focused on giving extra instruction to drivers, who have been driving under the influence of alcohol. It is assumed that these drivers lack a sufficient (mental/motivational) capacity to drive a motor vehicle and that extra training may correct for this lack. The ultimate aim of the educational course is to create the necessary conditions for a positive behavioural change amongst the course participants, resulting in the active avoidance of the combination of drinking and driving.

The Division Requisitions (Bureau Vorderingen) of the Dutch Licencing Bureau (CBR) is empowered on behalf of the Minister of Transport and Waterworks to impose an EMA-course on an offender. If the offender chooses not to follow the course within a certain period of time, his or her licence will be automatically invalidated. In the past, imposition of this course was done within the criminal law framework. In the new legal set-up imposition of this course is done within administrative law. Also, within the new framework, the offender has to pay for the costs of following the course himself. (The costs are 500 Dutch guilders or about 220 Euro). Drivers can be required to attend the EMA-course when the following conditions are met:

- The BAC is higher than 1,3 promille but not higher than 2,1 promille
- There is recidivism where the last violation has been found to be a BAC above 0,8 promille.

Contraindications are:

- Offender has caused fatal or heavy injury
- Offender has severe psychiatric problems
- Offender suffers from dementia
- Offender has insufficient knowledge of Dutch language
- Offender has already participated in the course within the five past years.

Within the EMA course the central theme is the incompatibility of alcohol use and participation in traffic. The course tries to change attitudes in this respect through the development of knowledge, insight and new skills of handling social situations. Compared to the old course before 1996, the new course requires a more active commitment from the participants and, besides knowledge and insight extra attention is given to the emotional component of the problematic behaviour and behavioural



change. In table 3, a description of the Dutch EMA-course, an alternative sanction for serious alcohol offenders who have shown problematic behaviour in traffic is given. (Derived from Vissers and van 't Hoff, 1998).

**Table 5.1 Description of the Dutch EMA-course**

Contents first course day	Contents second course day	Contents third course day
<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Acquaintance</li> <li>• Knowledge questionnaire</li> <li>• The use of alcohol in the Netherlands</li> <li>• The effects of alcohol in the body</li> <li>• Alcohol and driving ability</li> <li>• Alcohol in traffic: the consequences</li> <li>• Rounding off</li> </ul>	<ul style="list-style-type: none"> <li>• Opening</li> <li>• Drinking-and-driving: legal consequences</li> <li>• Drinking and driving: licencing consequences</li> <li>• Drinking-and-driving: the role of habit</li> <li>• Alcohol-problems and drinking-and-driving</li> <li>• Rounding off</li> </ul>	<ul style="list-style-type: none"> <li>• Opening</li> <li>• Drinking-and-driving: what can I do about it?</li> <li>• Imitation of life: an exercise</li> <li>• The future: intentions, pitfalls and deeds</li> <li>• Evaluation and end</li> </ul>

During the course the risks of drinking-and-driving are brought to the light. By way of a more active group-oriented, interpersonal approach an attempt is being made to bring about a conviction that drinking-and-driving is personally and socially unacceptable because of the inherent dangers. By way of exercises like self-observation and role-play it is attempted to let participants gain insight into the determinants of their problematic behaviour and to experience possibilities to engage in alternative (safe) behaviour.

There has been a recent evaluation research into the effects of following the course on attitudes, knowledge and behavioural intentions of offenders (Vissers, van 't Hoff, 1998). The EMA was evaluated by a questionnaire research where the responses from EMA-course participants were measured before and after the course and compared with before and after measures with a (quasi-)control group of offenders, who have been subject to the invalidation procedure of driving licence, but who have not (yet) participated in the EMA-course. The major results of the evaluation study are the following: The EMA-course clearly improves knowledge about the effects of alcohol within the human body and the relationships between alcohol use and accident likelihood. Also the attitude towards drinking-and-driving of the problem-drivers shifts in the desired direction. After following the EMA-course the problem-drivers report better behavioural intentions concerning the avoidance of drinking-and-driving. However, the same trend towards better behavioural intentions was also found, be it in somewhat lesser extent in the control-group.

In Germany, during the seventies the main reasons to adopt a rehabilitation system for convicted alcohol-impaired drivers and to spend efforts for its further development were experiences and observations made by psychologists who were active in the field of driver improvement. They found again and again that traditional programmes relying on concepts like driving knowledge, risk-acceptance or danger cognition were simply



ineffective for drivers who were repeatedly convicted for driving under the influence of alcohol. So it was reasoned that these drivers would constitute a special group and that the problems, which have to be solved by means of rehabilitation are unique as well, i.e. the attitudes towards drinking and driving as well as their alcohol consumption and related habits in general. So the expected effects were a substantial reduction of "repeating offenders" against DWI legislation.

The implementation of rehabilitation programmes is a matter of the German Federal States and their authorities. In practice this means that there are certain bodies (e.g. TÜV, DEKRA, AFN etc.), who carry out rehabilitation programmes. But which of the courses offered (e.g. LEER, I.R.A.K., NAFA, ALFA etc., c.f. Spoerer et al., 1994) are mandatory and/or lead to a renewal of the driving licence depends on the legislation in each Federal State and the decision of the local authorities. Generally it can only be said that there are two parties involved, i.e. the bodies, who provide rehabilitation programmes (e.g. TÜV) and the authorities responsible for licence administration. Rehabilitation programmes which are acknowledged by authorities have to be evaluated under the supervision of BAST. Although there are many local differences the general process can be described as follows:

- Conviction of a driver for DWI.
- If BAC measured is at least 0,16‰ (in some cases 0,2‰), or if the driver has been repeatedly convicted with a lower BAC the driver has to undergo a medical-psychological test by order of the authorities when he/she requests the renewal of his/her licence.
- As a result of this investigation a rehabilitation measure *can* be recommended by the investigation team (i.e. physician and a psychologist). Authorities decide if they accept this recommendation or not and demand from the driver to undergo an acknowledged rehabilitation programme.
- If the driver complies and participates at a rehabilitation programme and receives a certification his/her licence will be renewed.
- Generally all costs have to be covered by the convicted drivers themselves.

In Austria, Driver improvement for alcohol offenders has been a tradition since the seventies. It is usually conducted in groups of about 8 to 10 participants in several sessions over several weeks lasting all together at least 15 hours (in case of language problems or because of some other reasons different settings may be offered). Driver Improvement was first offered for people who were imprisoned for having killed or injured somebody when driving under the influence of alcohol. A couple of years later this measure was extended to drivers convicted for drunk driving more than once. However, it was for the licensing authorities to decide if a driver was compelled to attend such a driver improvement course. An evaluation study focusing on this very clientele showed that the recidivism rate could be markedly lowered if an offender attended such group sessions (people who attended these sessions had half the recidivism rate compared to offenders who did not, Michalke et.al. 1987). Since November 1st, 1997, Austrian drivers who are convicted for an alcohol offence of over 1,2‰, must attend a mandatory psychological retraining, beside suspension of their driving licence.



In case the driver had set the offence with a BAC higher than 1,6‰ or if he/she had refused to make a breath test, he/she has to undergo a psychological and medical examination, too. This measure often results in the conclusion that total abstinence is necessary because of an underlying addiction problem. So in certain cases the proof of medical treatment may be imposed as an extra measure.

Since January 1st 1992, novice drivers must attend the A-Kurs, a psychological follow-up training after drunk driving (0,1‰-limit). The courses have a clear legal basis, private organisations (who have to meet special standards) are approved to conduct rehabilitation courses. The psychological retraining is offered in group settings. Licensing authorities demand the offender to bring a certificate (for attending the rehabilitation measure) from an institute which is certified to offer these or courses (else licence is withdrawn or reissue is refused).

In Austria in any case offenders have to pay for the measure themselves. For institutes and psychologists quality standards are defined by legislation to ensure a high level measure.

Since 1996, a similar DI program is implemented in german speaking parts of Switzerland. The french speaking parts will follow in the next years (from 2000). An overview of rehabilitation programmes which are common practice in Germany, Austria and Switzerland is provided by Spoerer et al. (1994).

In Finland, Greece, Israel and Portugal, no mandatory psychological rehabilitation-, training- or education programmes are applied to drunk drivers currently. In Finland, there has been a lot of discussion on the need for rehabilitation for those caught repeatedly for drunk driving, but so far it has not led to any measures in this respect. The instructions for the medical doctors (Oppaita: 1998:6) drawn by the ministry of health only recommends the doctors to "motivate" those found having a drinking problem when renewing the licence "to seek for treatment". The doctors are also instructed to "help in arranging the treatment".

There is an experiment going on for the rehabilitation of repeaters. The main reason (for the experiment) is that in Finland repeating offenders are problem drinkers and their problem can not be solved by traditional deterrence (high risk of being caught and impending punishments). Other supporting measures are needed. Unfortunately, the authorities are rather slow in adopting new measures. There are plans to have more individually tailored programmes, but so far, these will be only on a voluntary basis.

In the UK quite recently the North Report (the Road Traffic Law Review published in 1988) supported the introduction of rehabilitation courses for drink-drivers whose blood alcohol level was up to 200 mg/100 ml (not high-risk offenders). The Road Traffic Act 1991 permitted a controlled experiment involving the offering of courses as a disposal in a selected number of courts across the country. Participants are required to pay for the course, but if it is successfully completed, the period of disqualification can be reduced by up to a quarter. The experiment is due to conclude in 1999. At present, the system enables courts to refer anyone convicted of drink-driving to a rehabilitation scheme, ranging from the first-time "lower-level" conviction to the repeat "high-level" offender, and there is doubt as to equal effectiveness for all participants. High-risk offender



schemes involve the need to provide medical evidence of their fitness to drive before reapplying for a license after its suspension; in operation since 1983.

French criminal law and administrative system of penalty points do not include mandatory programmes to be systematically applied to drunk drivers. Non compulsory and rewarded courses of the penalty points system include a training part on the dangerousness of drink-driving but there is no specific program addressing drunk drivers. However, because of the number of repeated alcohol offences, in a lot of jurisdictions, Public Prosecutors took the habit during the 1990 to use the opportunity of addressing intoxicated drivers to specific health services that locally care people with alcohol problem. Among these initiatives, there is an experiment for 5 years, promoted by the Public Prosecutor of a court and followed up by INRETS. It is a selective enforcement addressing all serious offenders with a BRAC equal or over 0.7mg/l (or a BAC equal or over 1.4g/l). Criminal qualifications on the base of BRAC limits are : from 0.25 to 0.4mg/l drink driving is a minor offence with a fine, over 0.4mg/l it is a serious offence. (BIECHELER, 1998). The experiment relies on the network of health centres aimed to care people with alcohol problems. The experiment also involves a cooperation of Police and Gendarmerie, Justice and the driver licence medical committee of the Département which must be consulted for recovering a licence after ban or withdrawal. This experiment began in 1996 and is foreseen for 5 years. At the end of the police custody, the Police or the Gendarmerie takes for the driver an appointment with a physician specialised in alcohol addiction cure and committed in the experiment. The medical test takes place before the appearance in Court. When the medical test reveals an occasional drinking, an information about the dangerousness of alcohol from both health and road safety views is only given to the driver. In the case of addiction, a therapeutic care is proposed. The prosecutor and the president of licence medical committee are informed of the results of the medical tests. At the time being, there is no plan to extend this experiment to other jurisdictions. Until now, it seemed that cooperation between justice and health sectors should go on local initiative of Public Prosecutor and agreement of local specialists. Usually, physicians specialised in therapies of alcohol addiction are rather reluctant to commit their therapeutic work in the frame of a criminal process.

### **5.3 REHABILITATION MEASURES IN THE FIELD OF SPEEDING**

Rehabilitation measures in the field of speeding are much less in use than in the field of alcohol. This allows several explanations – speeding is not perceived to be as serious in many countries as DUI is, speeding is perceived to be a variation of “normal” behaviour not related to medical or psychic problems. Anyway, in some countries psychological rehabilitation measures for speeders or dangerous drivers are implemented based on the assumption that modification of attitudes may result in improved behaviour but also on the assumption that dangerous driving may be related to personal conflicts and problems.

In Austria, Psychological driver improvement can be applied to drivers who were convicted for severe offences like extreme speeding. However, compared to alcohol offences, this is rarely administered, possibly because it is dependant on judgement of



the authority how to proceed with repeated speeding offenders. No strict procedure is determined by law like in alcohol cases. Also driver improvement for speed offenders is administered very rarely. The implementation is the same as with testing and rehabilitation of alcohol offenders. It is foreseen that this system might become more important if penalty point system will be introduced. The opinion, however, is that psychological testing and rehabilitation methods could be applied much more to speed-offenders. These offences are often not perceived in their severeness, sometimes offences result from personality disorders which also ask for psychological treatment. Deliberate use of these psychological measures could support the public reflection of traffic rules and social acceptance of speed limits. High programme standards again are necessary, as with measures concerning alcohol offenders.

In the case of novice drivers in Austria speeding and other traffic offences lead to the obligation to attend a psychological rehabilitation measure (see next section).

In Switzerland, DI courses for speed offenders, have been carried out as a general deterrence measure since the 1970s. However, no specific information on these measure has come available within this study. A specific deterrence sanction system as a feature of 2-phase driver training model is under discussion.

A comparable level of activities concerning speed related rehabilitation is reported in Finland. There has been little activities in terms of rehabilitation and training programmes, mainly because speeding is not seen as a disease. On the other hand, in terms of winter traffic and above all the preparing drivers for correct speed for conditions, there have been systematic training courses arranged by the Central Organisation for Traffic Safety (Liikenneturva). However, this is a border line case whether it can be associated with a support measure for traffic enforcement. Currently, research on the effects of 40 km/h speed limits on driving speeds and accidents is going on.

In the Netherlands, no wide-scale rehabilitation of speed offenders is implemented yet. Mainly because of the fundamental change of the legislative system (from criminal to administrative “Mulder” law, see the section about legal systems) and the wide-scale implementation of automated speed enforcement system, there has been an enormous increase in the annual number speeding tickets issued and a shift from driver detection to vehicle detection. For instance, in 1998 more than 97% of all 3.421.758 speeding tickets were issued on the basis of vehicle registration number detection. The drivers committing these violations were not identified. Only more severe (speeding) violations, are still processed under criminal law, requiring driver identification. Since rehabilitation programmes focus on influencing drivers’ opinions, beliefs and attitudes, a legislative system in which only the vehicle number is identified, is not suitable for these sort of measures.

Within the possibilities of the criminal law, a rehabilitation experiment was carried out in the court district of Amsterdam. Drivers who had exceeded the speed limit with more than 30 km/h in the district’s built up areas, could receive a 200 guilder (91 euro) reduction on their fine by voluntarily attending a three hour educative program. The course focused on changing the drivers’ behavioural beliefs, attitudes, subjective norm



and perceived control over one's own behaviour in relation to speeding in built-up areas. In a before-after evaluation survey it was found that those drivers who had attended the course reported a slight but significantly greater improvement regarding most of these aspects, than those who had deliberately chosen to pay the initial amount or had not been invited to the course at all (Brouwer and Heidstra, 1998). In spite of this and other promising experiments associated with rehabilitation systems in the area of speeding, the constitution of the traffic law seems, for the time being, to prevent wide-scale implementation in the Netherlands.

In Greece and Portugal, no specific activities concerning rehabilitation of speed offenders were reported in the present study.

#### **5.4 REHABILITATION MEASURES IN THE FIELD OF YOUNG DRIVERS**

In Austria, in 1992 a package of measures came into force for young drivers - licence on probation as well as rehabilitation programs and group courses for novice drivers were installed. Within the first two years (probation period) the alcohol limit for novice drivers is 0.01 BAC and within the probation period certain offences lead to the obligation to attend the psychological group courses as a rehabilitation measure.

Alcohol offences require courses which are much like the traditional driver improvement courses for alcohol offenders (however, novices have to attend after the first offence and the violation of the 0,01 limit is an offence already - see alcohol section). The developed concept of group courses, a combination of personal experience, group discussions and information is also applied to the young traffic offenders. The (first) violation of specific traffic rules - like exceeding speed limits (20 km/h in built up areas, 40 km/h in rural areas and on motorways), hit and run accidents, driving in the wrong direction, not giving right of way, overtaking where not permitted, causing an accident where somebody is injured, running red and amber traffic lights - results in compulsory attendance of a group course for traffic offenders.

The course setting for traffic offenders (V-Kurs) is as follows:

- 6 to 10 attendants per group
- all sessions chaired by a specially trained psychologist
- 4 sessions each lasting 3 hours
- between the first and the second sessions participation in a driving-lesson together with other participants and a specially trained driving instructor
- driving instructor is present in the second session to give feed-back and discuss issues arising from the driving observation.

This Austrian concept is unique. Mandatory courses are also offered in Germany, however, the concept and the philosophy is partly different (see also Appendix B). The German model is characterised by a school based curriculum and all sessions are conducted by driving instructors. The Austrian concept is also quite different from training specific skills which is offered on a voluntary basis in many countries. In contrast to the two-phase concepts of driver training which address all novice drivers, the Austrian concept only subjects offenders to a "Nachschulung" (the term used in Austria for these Driver Improvement courses for novice drivers). The intention of the



Austrian group courses is that the participants should gain insight into dangerous behaviour and specific risks in traffic. They should reflect their own habits and thus should improve their attitudes to traffic risk and develop clear strategies on how to adapt better to the rules and necessities in traffic.

A scheme developed by Hatakka et.al. (1997) gives an instructive background describing how driver improvement for novice drivers can work and it illustrates also where goals and contents of the course should be.

**Table 5.2 Structure and goals in driver training (according to Hatakka et.al. 1997)**

	Knowledge and skills	risk increasing factors	self evaluation
Goals for living			
Goals for driving			
Mastery			
Manoeuvring			

The authors mention that traditional driver training starts with the teaching of basic manoeuvring skills and knowledge (bottom left cell of the table). Depending on the concept and the intention of the course mastery of traffic situations is also trained in some countries, risk factors may be discussed and self evaluation may be part of driver education. The authors conclude that the upper sections and the second and third columns are often neglected in driver education. According to this structure the Austrian driver improvement measures are an attempt to address the higher levels of behaviour (goals for driving and goals for living) and the contents of the courses focus on risk increasing factors on the basis of self evaluation. This clear psychological approach focusing on attitudes is based on the assumption that in most cases accidents of young drivers result from misperception of risk and unfavourable attitudes. The ways to achieve the intended results of this measure are group discussions on traffic related topics, but also on personal issues like handling everyday problems, goals in life, the personal importance of mobility and of a car. Of course, also information is provided in this type of course.

The effects of the course were assessed in an evaluation study (Christ). Three different measure were chosen:

- attitude changes have been measured by comparing attitude questionnaires before and after participating in the group course,
- every individual attendant was assessed according to various scales (5-point rating) after the course by the psychologist,
- concerning the driver record after the course recidivism data have been collected for the remaining probation period (average observation period of more than 2 years).

Data on the participant, the group course, attitude changes and assessment by a psychologist were available for 989 subjects. This evaluation study showed that novice drivers convicted for severe traffic violations can gain benefit from the mandatory psychological driver improvement course which is imposed by Austrian law. The



psychological intervention concept has proved to be useful. Especially a broader psychological approach dealing with habits and life style has show favourable results. No evidence has been found that a focus on knowledge- and skill related issues leads to a reduction of recidivism. An important result is that no specific subgroup of course participants could be found who benefit more or less from the participation in the course. Probably, those who need the course expose themselves by conspicuousness in traffic. The results support the assumption that traffic violations of young drivers are mostly a result of deficits in higher order behavioural requirements like reflection of goals for driving and goals for life and living. A methodological result of this investigation is the fact that the other chosen effect parameters (attitude change and rating by psychologist) show only little correlation with recidivism; this suggests that no safe conclusions can be drawn from evaluation studies that are based on just one effect parameter only (Christ, in press).

Other countries involved in the study did not report any age-group specific rehabilitation measures.

## **5.5 CONCLUSIONS AND RECOMMENDATIONS**

Enforcement and rehabilitation measures are two aspects of a system which support each other well. Rehabilitation adds a new aspect to enforcement a quality which really can improve traffic safety.

Concerning special prevention rehabilitation aims to support the individual offender to achieve improved driver behaviour in the future. The relapse rates related with drinking and driving especially but also with other traffic violations in certain cases confirm that many drivers need support when they should change their behaviour in traffic.

Rehabilitation measures will be more effective the better they are tailored to the individual reasons underlying traffic violations.

Alcohol offences have to be considered as a specific kind of offence and treated in a specific way. Rehabilitation programs for alcohol offenders have to consider different degrees of alcohol related problems, therefore a profound examination at least for high intoxicated offenders is strongly recommended as an accompanying measure with rehabilitation measures. Already the enforcement activities of the police can give some indicators on the severity of the alcohol problem. Measured alcohol concentration, certain circumstances of the offence may serve among others as criteria for assigning offenders to different treatment. Dependent from drinking culture certain kinds of rehabilitation measures will have different priority.

Concerning other traffic offences than alcohol psychological interventions seem to be more appropriate than skill- or knowledge-based interventions (usually high risk drivers are very skilful and are aware of what they are doing).

Apart of the special preventive effect rehabilitation measures also can have a general preventive effect. The fact that certain traffic offences are not only treated with fines and license ban but also with rehabilitation programs can underline the normative



character of traffic regulations. To achieve such an effect the rehabilitation programs need to be well known to the drivers and their concept must be understandable and reasonable.

Traffic enforcement and its acceptance often suffers from the perception that enforcement does not have (sufficient) effect on driver behaviour. The activities of the police will be seen more reasonable if there is really hope that the enforcement activity will have an effect in the long run. Also the motivation of police officers may be increased if they know that their enforcement activities have reasonable consequences.

Rehabilitation measures will have more effect if they are part of the licensing system and they are more accepted if they are assigned according to clear criteria which address every driver the same way. A high quality standard support acceptance.

Special attention to young drivers is justified on the background of their high accident and fatality risk. Instruments like license on probation and specific rehabilitation programs serve as a countermeasure to typical juvenile risk-factors due to life style and related habits.



## 6. Synthesis and recommendations

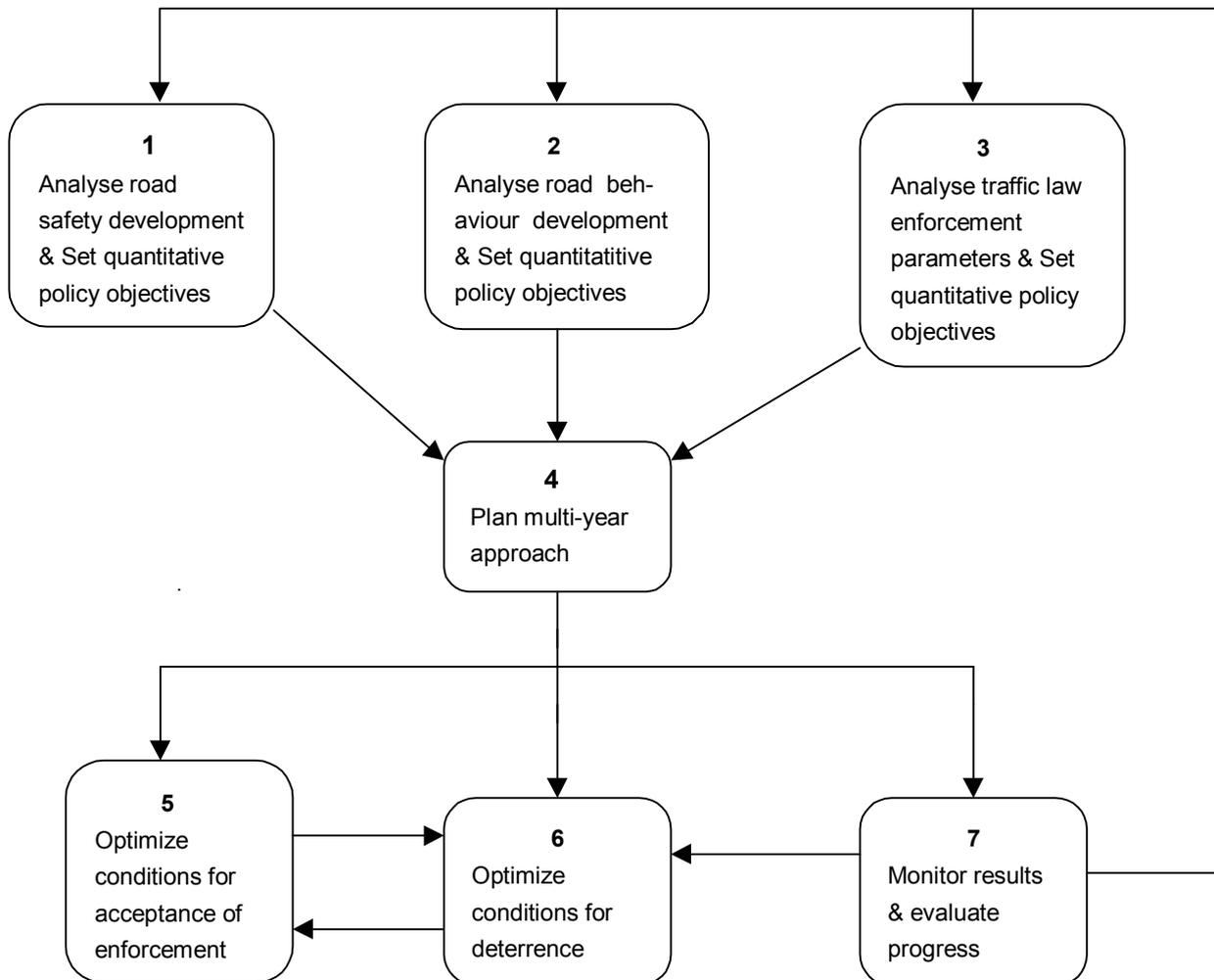
### 6.1 INTRODUCTION

In previous chapters we have taken a look at administrative and legal measures without considering more general systems requirements. In this chapter we attempt to come to a synthesis of results concerning support systems, where legal and administrative measures together with other possible support systems (treated in Working Paper 4) are handled in one prescriptive model. In Figure 6.1 we present a heuristic scheme that sets out to delineate the necessary steps to improve the system of traffic law enforcement.

Police enforcement of traffic rules does not arise ‘out of the blue’, but is a measure intended to satisfy certain societal or institutional objectives. In most European countries there are basically three frames of reference that set the basic parameters for police enforcement. These frames are: (1) the road safety situation and objectives for this situation, (2) the road behaviour situation and objectives for this situation and (3) the situation of traffic law enforcement and the objectives for this situation. In an ideal situation, these frames of reference should be combined in order to reach a meaningful and realistic perspective on the road safety benefits of police enforcement and how police enforcement should be supported to achieve these benefits. In practice, the only way to achieve such a meaningful perspective is that several governmental agencies work together in order to establish a planned, agreed upon approach to police enforcement.

A planned approach could be made for a period of say 4 to 5 years, accompanied by an evaluation of short term, mid term and long term results. The planned approach should optimise the support conditions for police enforcement. These support conditions are various but can be subsumed under three general categories: acceptance, deterrence and monitoring. Under the umbrella of “Acceptance” we subsume all activities intended to generate public (and political) support for police enforcement procedures in traffic. Acceptance is very important since it is in a very real sense the moral “feeding ground” of deterrence. The fear of being detected by the traffic police for a traffic violation is ultimately rooted in the fear of more general social negative reactions to this particular offence. If a traffic offence is more or less tolerated by the general population, this will ultimately erode deterrence. “Deterrence”, of which the backbone is the psychological fear or aversion of being detected for a traffic violation, is dependent upon general societal norms, but also dependent upon well-planned enforcement operations, that have a fast and clear follow in the subsequent steps in the enforcement chain. Strict and clear policing procedures followed up by quick legal procedures and possibilities for appeal will likely increase the acceptance of the enforcement system. “Monitoring” refers to the whole of activities and measurements undertaken to gain an understanding of the development of behaviour and enforcement parameters over time.

**Figure 6.1. A heuristic 7-step scheme for implementing changes in the system of traffic law enforcement: Synthesis of international experiences.**



In a planned approach to traffic law enforcement measures in the fields of acceptance, deterrence and monitoring are necessary to support the effectiveness and efficiency of police enforcement. In the subsequent sections we will discuss these notions in more detail and provide our basic recommendations and conclusions.



## 6.2 EVALUATION OF TRAFFIC LAW ENFORCEMENT: THREE FRAMES OF REFERENCE

To conclude anything about how legal or administrative measures, we preferably would like to have some reliable indicators of the total quality of the system of traffic law enforcement and the separate qualities of the respective links. It is not enough to have this information for say one year. To complicate matters further, we would need these parameters for different categories of offences such as speeding, drink-driving, seat belt use, offences by young moped riders, offences by heavy traffic. It is not enough to have this information for, say, one year. The development of these parameters over time would give us an insight in the possible directions the system is heading.

If we consider the enforcement process as a chain of inter-linked activities, then we would need some information on the crucial system parameters. These would be:

- (estimated) or calculated contribution of the system towards safe traffic behaviour and road safety;
- indicators of the deterrent value of the system (e.g. perception of police controls and penalties by the public);
- acceptance of the system by the public (e.g. perceived justice of penalties and procedures);
- willingness to co-operate with the system (e.g. by paying tickets);
- costs in time and money of the system as well as benefits such as time and costs “saved”;
- mean processing time of offence;
- number of cases;
- average time/costs per case.

In fact, for most European countries only “snippets” of information are available. For instance, we hardly know of the costs that are involved in the total enforcement chain. Since the cost issue is always politically sensitive, relevant statistics are difficult to obtain. Also, the involvement of different parties in the chain of traffic law enforcement may hinder an overall assessment. At the highest administrative level, the parties involved are different ministries. If these ministries have not formulated a shared, integrated policy, including a shared evaluation policy, it is less likely that an integrated evaluative study will be performed. Also, co-operation at highest administrative levels may enable or facilitate co-operation between lower levels.

As we have seen, in most European countries there is a “natural” tendency to reduce the workloads of the courts and court officers involved in processing traffic offences. Fixed penalty notices, administrative procedures, fines on the spot and other steps are taken to prevent a “light “ offence from being processed as a full criminal case. In most countries there is a mix of criminal and administrative law procedures. As we have seen in the evaluation of the British legal system, the administrative procedures under criminal law (imposing fines) can cover a significant part of traffic offences, however, within the



court system there remains a lot of “loop-holes” which enable serious offenders to avoid or, at least, to commute the punishment.

The decision of a country to create a separate legal frame of legislation that functions independently from the criminal frame is very likely mainly determined by cost-efficiency considerations. Reasoning from cost efficiency alone, it seems that legal or administrative attempts to reduce the workload of courts are inevitable. As we have seen in the Dutch example, the introduction of an administrative traffic law enforcement system permits the processing of offences to be performed by a third, civil body, and thus results in a reduction in overload of both police and justice systems, which, in turn, increases their efficacy. Processing capacity is especially needed for camera-based enforcement that enables the detection of a large number of offenders.

Of course, besides efficiency considerations, moral considerations and legal principles will affect decision making about the legal status of an offence or the evidence criteria. For instance, whereas a speeding offence may be considered by the public as a “folk crime”, the same public very likely judges drink-driving as a basically criminal offence. It is unlikely that drink-driving will ever be considered as an administrative type of offence. Another example of the interface between legal and economic arguments is to be found in the evidentiary requirements regarding the prosecution of speeding offenders. The principle of fast and cost-efficient prosecution may be in conflict with legal and ethical principles concerning basic rights and privacy of the suspected speed offender. The requirement that an owner is in principle legally responsible for violations that have been committed with her vehicle, certainly benefits the efficiency and speed of the prosecution procedure, since the difficult proof of driver identification is not necessary. However, to put the burden of proof in this manner on the vehicle owner is held unjust (and illegal) in many European countries.

There are three general frames of reference that can be used to assess whether traffic law enforcement, including its legal and administrative machinery, operate well. First, there is the road safety situation and its development over time. If there are ambitious road safety objectives and if police enforcement is seen as an important instrument to improve road safety, then very likely there will be governmental support for police enforcement of traffic rules. The police organisation, which has its own policies and objectives, needs to know that there is strong political support for enforcement of traffic rules in order to reserve resources for this sector. Without high-level political support for this policing activity it is very likely that the police will only engage in routine- like “token” enforcement activities without a specific aim of improving its own quality of enforcement.

A second frame of reference is given by the data on actual traffic behaviours. Whereas all European countries have an accident registration, only a few countries such as for example Finland, France, Netherlands, United Kingdom systematically collect information about traffic behaviour. For instance, Finland has a yearly survey on drink-driving.

A third frame of reference that sets the way we think about and prioritise police enforcement, is the information about the machinery and results of the total enforcement



chain. In most European countries information is gathered by a Ministry or central statistical bureau concerning the number of fines for traffic violations, the number of offenders sentenced to prison, the number of license withdrawals, the number of offenders referred to rehabilitation programs, the number of points, the number of court cases, the number of appeals against fixed penalty notices etc. The police may provide information about specific indicators for traffic enforcement activities, e.g.: number of hours spent on checks, the number of drivers checked for speeding or alcohol, the number of tickets written etc. Despite the fact that these statistics tell us something about the working of the traffic law enforcement system, they do not tell the whole story about the actual quality or effectiveness of police enforcement and in fact may even be misleading in this respect. What can we learn from the fact that the number of tickets has increased considerably over a period of a year? The statistic itself does not give us a clue to the “complete story”. The police may have intensified their procedures, or used the same procedures but the road discipline of road users has worsened, or the police has used procedures that were “smarter” in detecting road offenders.

In general we may state that in isolation, each of the three frames of reference (1. Accident-Frame 2. Behaviour-Frame; 3. Enforcement-Frame), is insufficient to evaluate, set objectives for or steer police enforcement. The statistics within each of these particular frames cannot be interpreted in any meaningful way in regard to the complex question of how police enforcement should be conducted or supported in order to benefit road safety. In practice, in most European countries incomplete information concerning only one or two frames of reference is used to evaluate enforcement activities (if evaluation occurs at all).

For example, if we know that accidents where alcohol is involved are on the rise, this tells us little about the changes in drink-driving patterns. There are several questions:

- Do alcohol-related accidents increase because the number of drivers drinking has increased?
- Do alcohol-related accidents increase because the amount of consumed alcohol is rising?
- Do alcohol-related accidents increase because of changes in nightly travel patterns?
- Do alcohol-related accidents increase because of a mix of alcohol and other drugs?

It is doubtful that these questions can be answered from accident statistics. The answers from accident statistics are very limited if the registration of alcohol intake of accident victims is not reliable. We conclude that accident registration alone provides limited information at best to set targets for enforcement and to steer enforcement in the right direction. Systematic surveys of traffic behaviour are required to fill up this gap in knowledge.

The same reasoning applies to the use of global statistics, such as the number of registered offences. The number of detected traffic offences is a very limited indicator of the total quality of police enforcement operations. The quality of police enforcement is dependent upon a sensible allocation of manpower over time and locations, good visibility of controls for the general public, unpredictable pattern of controls at sites where road safety is at issue, strict and fast operational procedures, good contact with



the public etc. A simple output indicator, like number of registered offences, does not capture all these quality aspects. Furthermore, as a single, separate indicator the number of registered offences is not only limited, but also equivocal. For example, a decrease in the number of registered offences could be interpreted in quite different, even contradictory ways. It may simply mean that the police themselves have performed less enforcement activities or less efficient enforcement operations. On the other hand, the interpretation could be that enforcement was so successful that an actual behaviour change has occurred. A third interpretation would be that enforcement levels are exactly the same and violation levels also, but the road users have simply become more adept at avoiding road checks. Without further information, one global statistic can simply mean anything a policy maker or police official wants it to mean.

The foregoing examples illustrate that the general question of how police enforcement improves road safety cannot be studied by looking at one or a few global statistics. In our opinion, it is only when information from the three frames of reference is combined in one meaningful overall perspective, that we can truly gain some insight into the machinery of traffic law enforcement and its road safety benefits.

It can be argued that, in the short term, behavioural data are more relevant for setting objectives for police enforcement and judging the effectiveness of police enforcement than accident data. There are several reasons for this. Firstly, theoretically speaking police enforcement of traffic rules is primarily intended to bring about an improvement in behaviour, which subsequently should be reflected in an improvement in the accident statistics. Therefore, it makes sense to use behaviour as a criterion next to the criterion of accidents. Secondly, if we restrict ourselves to using the criterion of accidents, it is difficult to set quantitative objectives for police enforcement.

A third reason why behavioural indicators are necessary to support the planning and evaluation of police enforcement, has to do with the relationship between behaviour and accidents. We know from scientific research that traffic behaviour and traffic accidents are related. However, in practice the relationship between traffic behaviour and traffic accidents is not always one-on-one. In police projects, it has been experienced that observed traffic behaviour improves, whereas at the same time the number of accidents rises. This paradox is explained by the fact that intensified police enforcement of traffic rules sometimes indirectly leads to a much better accident registration. Also traffic behaviour may improve, but due to extreme seasonal weather conditions or due to sharp increase in motorisation the accidents still rise. It is clear that in certain cases improvement in behaviour does not always translates it self in actual road safety benefits. We conclude that in the long run, say over a period of five years, police enforcement should be evaluated against the criterion of accident reduction. But in the shorter run, over a period of months or a few years, the behavioural criterion should be a separate criterion for establishing the effectiveness of police enforcement and for setting realistic ambitions for police enforcement.

We formulate the following recommendations:

- An analysis of the contribution of traffic law enforcement to road safety should make use of behavioural, accident and enforcement data. If one series of data is left out of the equation, meaningful conclusions are difficult to formulate.



- If accident data are incomplete or not reliable, the collection of behavioural data as an alternative measure for enforcement effectiveness should become the highest priority in the short run, since improvement of accident registration can be a slow process that takes up many years.

Specifically concerning administrative measures we formulate the following recommendation:

- Administrative measures should be taken to facilitate combination of accident, behaviour and enforcement data. For instance, if data are collected by different Governmental agencies using different databases, some common indexes should be agreed on that would facilitate coupling of databases. In the modern age of information technology, it should be very easy to set up databases that can be used for research or monitoring purposes and that can be combined.

### **6.3 PLANNED APPROACH TO TRAFFIC LAW ENFORCEMENT**

In road safety work, it has become a general tenet that the best road safety plans are the result of a co-operation of several stakeholders in the field of road safety, who share resources to come up with a planned approach to road safety in a region or city. The same tenet, however, has not been applied often in the work of police enforcement. From the theoretical viewpoint of deterrence theory, police enforcement has been primarily viewed as a link in the total enforcement process. From this viewpoint it makes a lot of sense to look for changes within the legal or administrative enforcement system to support the effectiveness of police enforcement. This view has been so dominant within road safety literature that there has been some neglect to look at support systems for police enforcement that derive from other scientific disciplines, e.g. information, communication, behavioural or planning sciences. Also, the discussion of separate, single support measures has ignored the problem of how measures can be co-ordinated in one approach that satisfies best the needs and targets of police, courts, researchers and the public.

We argue that various support systems for police enforcement should be integrated in a planned multi-year approach to traffic law enforcement, in which several agencies co-operate in order to make the most of scarce resources. For large countries like Germany, United Kingdom or France, a planned approach on the national level is hardly feasible or workable, since the level of abstraction, the speed of decision-making and political manoeuvring on that level are factors that would impede the close working relationships needed for a planned approach. This is not to deny the paramount role of high-level politics in assuring the quality of police enforcement. Certainly, at the highest political levels important decisions are being made about allocation of resources, national policy objectives and targets and prioritisation of activities. On a strategic level, national decision-making is very important.

A planned approach to police enforcement requires that three frames of reference (accidents, behaviour, enforcement parameters) are brought together in order to arrive at a complete understanding of the relationship between police enforcement and road safety and the direction into which the system should be headed.



In European countries, there are three basic problems in regard to the combination of these frames:

- The monitoring problem: simply said, several data are not (reliably) collected on a national level; without data the problem or issue itself is “invisible”.
- The scale problem: data are available but not on a national scale or not in a standardised way; again the problem or issue is not “visible” on a national scale.
- The institutional competence problem: different Ministries and Governmental departments have competence over the separate frames and there is only a low degree of interdepartmental co-ordination or co-operation. In this case, there is some notion of the issue at the national level, but different agencies hold different pieces of the “puzzle”.

Obviously, these problems are closely intertwined. If a European country is sizeable like Germany, United Kingdom or France, this decreases the likelihood that national monitoring of behaviour is being done a national scale. The costs for monitoring research would be quite large. In small countries like the Netherlands and Finland, the research would be far less costly.

Likewise, the monitoring problem, or better said the lack of monitoring, is often rooted in the fact that research demands the co-operation of different Governmental departments or agencies in one country. For instance, a yearly survey of drink-driving would ideally require the co-operation of the (traffic) police who may reside under a Ministry different from the Ministry which uses the data in the first place

In the light of the fore-mentioned problems we conclude that we cannot learn much about national systems of traffic law enforcement. This conclusion does not need to worry the reader too much, since there are excellent opportunities to learn about the system of traffic law enforcement if we restrict ourselves to the study of smaller scale-systems, such as small European countries, for instance, specific federal States within Germany, or specific provinces within France. In Europe, small countries with a long tradition of road safety policy and a tradition of interdepartmental co-operation provide us with the best-documented research, monitoring and the best “laboratory” for studying new measures.

We recommend that in future European projects the study of subjects like enforcement or other measures is restricted to a scale on which relevant information can be collected to study the problem at hand. In future European projects it should be considered to target comparisons at national provinces, regions or districts for which there are good statistics available in terms of traffic parameters, enforcement levels, and accident studies.

We also conclude that the prescriptive model in Figure 6.1 in practice will function best at some intermediate level, such as a region, a province or a Federal State.

However, a planned approach to police enforcement would also involve decisions about tactical and operational procedures at abstraction levels much below the national level. Therefore, such an approach is only feasible at the regional or provincial level. The



agencies involved would be the police themselves, local administrators, road safety experts and court officials. Moreover such an approach would need a decision-making machinery that has the flexibility to operate fast when there is a need for a change in enforcement tactics in response to sudden new or unexpected developments in traffic.

It is expected that the regulation of extra enforcement activities by a centrally planned approach, be it at a provincial or local level, will yield several benefits:

- Better monitoring of accident causes and compliance levels within a region;
- Better reasoned choices about the allocation of scarce enforcement resources;
- Better regulation of enforcement activities within the region;
- A more transparent relationship between the use of (police) resources and (measurable) results;
- A larger flexibility in the choice of usable means;
- Mutual supportive interaction between different enforcement activities;
- Better co-ordination between various road safety initiatives within the region.

We formulate the following recommendations:

- To integrate various support systems for police enforcement in one overall program, a planned multi-year approach to police enforcement should be set up.
- A planned approach to police enforcement can only function at a regional level where fastness of decision-making and tactical and operational decisions can be taken in response to changes in traffic situations or special events or developments.
- All parties involved in the enforcement chain should be involved in the planned approach.
- A planned approach to police enforcement should as standard incorporate three equally important domains: (a) conditions for acceptance, (b) conditions for deterrence and (c) monitoring of results.
- In the short term (say halve year or one year), evaluation of police enforcement should be guided as much or even more by behavioural data rather than only accident data.



## 6.4 ACCEPTANCE

Somewhat ironically, deterrence is ultimately rooted in the approval of the public of the deterrence system (e.g. Andenaes, 1977). The ban on alcohol in 30s America did not achieve much deterrent effect; rather it increased the alcohol intake and made some for an interesting period in traffic law enforcement. It didn't work simply because the general public did not approve it. Likewise, the ban on smoking in America's public spaces works simple because the general public supports it. On a psychological level, we may state that deterrence works because the offender fears negative social reactions from his immediate environment. Fear of detection by the police is partly the fear for the moral disapproval of society. Drink-driving and speeding in residential areas meet with strong societal disapproval.

In the light of these considerations, it is important that traffic law enforcement is seen by the public as a justified and meaningful activity that benefits the safety of the collective drivers. Fortunately, results from both national (e.g. in the Netherlands) and international surveys (SARTRE-2) show that there is a large majority support for police enforcement of traffic rules. Also, there is large support for specific legislative enforcement measures such as higher penalties and zero limit for young drivers. It would be too simple to take this support for granted and too assume that it will continue. Drivers who tend to support police enforcement in general tend to become less fervent in their support when they themselves are repeatedly confronted with, say, speed checks. Again, it would be too simple to conclude that general acceptance is there. In the Netherlands there is increasingly the experience that speed cameras or red-light cameras are the object of vandalism. In the nineties the large increase of camera-based detection of speeders in the Netherlands may have polarised negative attitudes towards camera-based enforcement operations.

At the moment we lack a clear systematic theory about how the process of deterrence is related to acceptance. It is clear that 'acceptance' in itself is very broad notion; any one-dimensional definition of the concept is bound to be too limited. Firstly, there can be different degrees of acceptance of the traffic law system amongst different parties; e.g. the public, the journalist community, the political community and the police and legal administrators may have different views on the traffic law enforcement system. Secondly, acceptance can be on the attitudinal level as well as on the behavioural level. We cannot simply expect a good consistency between these levels: e.g. drivers may have a positive stance towards speed enforcement and yet also commit speed violations themselves. Also, some drivers may have a very negative attitude towards speed enforcement and fixed penalty tickets. Yet when these drivers receive a ticket they may pay the ticket quickly and without protest. Thirdly, 'acceptance' is a slippery notion since general public acceptance of a system can actually co-exist with active and troublesome resistance against the system. In a few countries we can observe very negative (minority) attitudes towards camera enforcement, resulting in destructive behaviours (e.g. the mentioned example of camera vandalism in the Netherlands).

Since police enforcement has always been treated within the theory of deterrence, there has been almost no theoretical work on acceptance issues. It is our hope that in future research, public perceptions of acceptability of the traffic law enforcement system will



be studied in more detail, based on theoretical notions. For instance, those notions could be derived from social-psychological attitude theories, from sociological theories about social change and/or from criminal or psychological theories about the perception of justice.

In the absence of a formal theoretical framework we would still like to speculate about possible measures to increase public acceptance of police enforcement. How can legal or administrative measures contribute to the public acceptance of police enforcement?

First of all, the legal set of laws and rules should be clear and safety relevant for road users. Many countries have sets of laws and rules that were conceived several years ago. A revision of traffic law legislation may be used to enhance the acceptance of traffic laws. According to Noordzij (1988), the effectiveness of any set of traffic rules can be improved in a number of ways, starting with the revision of separate rules. A decision has to be made whether the rules have to be kept simple and small in number, or more specific for particular groups of road users and particular situations. While the first option has the advantage of being simple, the prescription of the behaviour has to be either general and vague or more precise but rigid. The second option results in a more comprehensive set of rules, each of which is better suited to the diversity of actual traffic situations.

Secondly, it should be considered to introduce more personally relevant aspects in the administrative system. In an administrative system, a driver usually just receives a notification that he or she has committed an offence on a certain day on a certain location. Some additional information could be given as to why the behaviour is considered dangerous on that location, maybe even together with some relevant accident or behavioural statistics. The new information technology would make it relatively to pair specific location information or statistics with a ticket notification. For minor traffic offences the use of warning letters can be an effective means of modifying driver behaviour especially in situations where it is evident that illegal driving was not intended. Besides, warning letters can also reduce the administrative workload associated with offence processing and can lead to more positive community attitudes towards traffic enforcement operations. (Zaal, 1994).

Thirdly, rehabilitation programs introduce a new personalised quality into the enforcement and licensing system. In contrast to the supportive legal and administrative measures setting thresholds for fining and license suspension, aimed at general deterrence, rehabilitation programs address the individual driver and his or her personal motivations. In this sense they primarily have a specific supportive function. They are focused on offenders; those drivers who have actual experienced detection, prosecution and punishment. Assumptions on underlying reasons for the offence (or repeated offences) constitute the quality and method of intervention. However, rehabilitation programs may not only have an effect on the single offender who is submitted to the measure. If rehabilitation programs are known to the public – which is the case in countries where measures are part of the licensing system – rehabilitation programs can achieve a general preventive effect. Many drivers may perceive the requirement to undergo a rehabilitation as a consequence of a traffic offence that they should try to avoid.



Fourthly, when strict and well-balanced procedures are applied for processing traffic violations under administrative law, high levels of payment of traffic fines are attained, along with overall acceptance of law enforcement system

Finally, the police may also increase the acceptance of traffic laws in a number of other ways. They may give the right example in traffic and may actively inform the public about police policy in matters of road safety and the reasons behind specific police activities. Furthermore, the police should invest some time in informal communication with road users and pay attention to complaints or suggestions about road safety. Also, they can give practical or symbolic support to actions or activities of other road safety organisations. Last but not least, the police may substitute traditional punishment with alternative sanctions that may appeal to the public and encourage them to change their attitude.

Besides public acceptance, acceptance of the legal system by the police, court officials and administrative bodies is crucial. As we have seen in the evaluation of British sentencing practices, police and judges tend to have diverging expectations regarding these practices. Notwithstanding the efforts to co-ordinate the police and court procedures, under the criminal law, the practice of judging traffic cases accepted by the courts appears to be quite different from police expectations. On the long run, these inconsistencies may undermine motivation to work according to procedure or motivation to be associated with proceedings at all. One of the recommendations in the next paragraph addresses this problem.

We conclude that public and political acceptance of police enforcement is, certainly in the long term, the most basic support condition for the success of enforcement efforts. In the well-publicised successes of police enforcement in Australian states, often the emphasis is being placed on the massive scale of police operations, whereas the large public and political acceptance that supported these enforcement programs is not always mentioned.

If the police have ample resources but public support for police interference is quite low, extra attention should be paid to explain police action to the public. The communication surrounding enforcement activities should try to mobilise social support for the police action. Partnerships with public interest groups or citizen groups may enhance the status of the police actions for the public.

From the viewpoint of increasing acceptance of the system we recommend the following in the field of administrative and legal measures:

- Sets of laws and rules that were devised decades ago should be periodically revised to assess whether they still are relevant and clear to modern day traffic situations. Each rule should be checked to assess whether the situations to which it refers are outdated, whether the arguments for the prescribed behaviour still hold and whether this behaviour can be prescribed in more detail.
- We recommend that the administrative notifications of traffic offences is combined with more personalised messages to the traffic offender, explaining the risks of the behaviour or location.



- More uniform sanction systems also based on the perceived fairness of drivers ought to be sought for and developed in Europe.

In the sphere of publicity we recommend the following measures to increase acceptance of enforcement:

- The public should be informed about the quantitative and behavioural targets for police enforcement set on the regional level at the start of a long-term enforcement project and be informed about the progress in reaching this target.
- From social-psychological point of view, publicity about enforcement should provide more information about the number of conformers to traffic rules rather than the number of offenders (which is current practice).
- The large-scale introduction of camera-based enforcement should be accompanied by a clear pre-planned safety strategy in which objectives and safety considerations are clearly communicated to the public.
- The large scale introduction of camera-based enforcement should be accompanied by a warning phase where offenders receive personalised warnings.
- The selection of places and sites for red-light cameras, speed cameras or other offence-registering cameras should be clearly based on road safety criteria or public demand.
- There should be a reasonable mix of contact-based and camera-based enforcement in order to ensure that the moral (and symbolic) authority of the police is still recognisable in the enforcement procedures.
- There should be transparency concerning the financial schemes underlying traffic law enforcement. In general, road users would be willing to accept the fact they are being fined for a traffic offence, if they know that the enforcement earnings are being channeled back into the quality of the traffic system.

## 6.5 DETERRENCE

A fundamental issue, and essentially philosophical in nature, is the question whether the general or specific deterrence function of enforcement should be supported. These two seem mutually exclusive. In contrast to the supportive legal and administrative measures setting thresholds for fining and license suspension, aimed at general deterrence, rehabilitation programs address the individual driver. For instance we see in the Netherlands that there is an emphasis on massive administrative fining, whereas in Germany and Austria there is a strong emphasis on individually tailored systems of rehabilitation of the offending driver. At the moment we simply lack the information or even the criteria to state that one system is necessarily “better” or more “safety-oriented” than the other.

Obviously, both general and specific deterrence are important for road safety and there should be some reasonable balance between the two. How can we define this reasonable balance? First of all, to create some minimum level of general deterrence it would be



necessary to have objective detection levels for certain offences that are not too low. For instance, it may be considered to check, on average, :

- a) monthly 1 out of every 2 to 3 drivers on speeding;
- b) yearly 1 out of every 8 to 10 drivers for drink-driving;
- c) yearly 1 out of every 12 to 15 drivers on the use of seat belts;

These detection levels are quite modest compared to the high detection levels in some Australian states. Yet, in Europe one or more of these detection levels are not realised in a number of countries. For instance, in the Netherlands detection level a) is easily achieved, detection level b) is perhaps nearly achieved and detection level c) is not achieved. Britain and Germany for example do not reach any of these detection levels yet (in some areas or regions these detection levels may be achieved but not nationally).

Presumably, the specific legal measures that would support the general deterrence function would be those measures that enhance the threat of license revocation and that would presume owner responsibility for offences where the driver cannot be identified. Concerning specific deterrence, there is some evidence that point systems, withdrawal of licence and carefully operated rehabilitation programs can have good effects. Administrative measures, such as a point system, would very likely increase the specific deterrent effects. At the moment, there is no clear scientific evidence indicating the size of this effect. Besides these legal and administrative support measures, publicity is a very important measure to support these deterrent function.

To optimise *the deterrent properties of legal and administrative measures* we recommend the following:

- It is recommended to create explicit agreement between various actors (legislators, police, prosecuting bodies) about the consequences that follow detection of offenders.
- In order to create a level of general deterrence minimum detection levels should be realised. We would propose the following detection levels: a) *monthly*, 1 out of every 2 to 3 drivers is checked for speeding; b) *yearly*, 1 out of every 8 to 10 drivers is checked for drink-driving; c) *yearly*, 1 out of every 12 to 15 drivers is checked on the use of seat belts;
- Under a criminal law system, it is advisable to carry out periodic surveys of judging practice, in order to ascertain the discrepancies between the police deterrence practice and actual punishment of violators.
- In regard to the latest technological developments, legislation ought to be reassessed and reviewed throughout Europe making it possible to introduce new technical solutions as well as making better use of existing ones as enforcement support systems.
- Introduction of automatic enforcement (under the criminal law system) should be accompanied by wide application of fixed penalty notices and special administrative procedures for their treatment.



- The only way to reduce overload of the police and justice systems is to allow more traffic regulation infringements to be treated under administrative law. The development of (administrative) support systems ought to decrease the burden of courts and the police rather than vice versa.
- Legal systems should as a standard, provide the use of different categories of rehabilitation programs as alternative sanction for heavy fines, license withdrawal or prison sentence. At present only some European countries provide for this alternative sanction.
- Tailoring sanctions to meet individual requirements needs further development. For instance, in some states of the US young traffic offenders are taken on a tour through the city morgue where the bodies of traffic victims provide a vivid illustration of what the term traffic risk stands for. Although this particular alternative treatment seems harsh and not very civilised, it may well be very effective for a specific category of offenders who like to learn by practical experience.
- Finally, EU societies should encourage the use of new technologies to prevent drivers from committing violations and decrease the burden of legal systems and the police. Road transport systems ought to be developed in a way that will make driver control systems unnecessary.

## 6.6 MONITORING

An integral part of any planned approach to police enforcement should be the setting of national and regional targets and the monitoring of both police activities and traffic behaviours. Monitoring of police activities and traffic behaviours enables policy makers, police and, finally the public, to evaluate the potential benefits of enforcement and to decide on further allocation of resources for enforcement. Monitoring is an indispensable instrument for political and public accountability.

In Working Paper 12 of the ESCAPE project extensive guidelines for monitoring routine enforcement activities and effects have been given (Gelau, Gitelman, Jayet and Heidstra, 2000). This paragraph does not cover monitoring in such depth as in Working Paper 12. The report by Gelau et al. focuses on technical and methodological issues involved in monitoring police activities and effects and provides technical guidelines. In this paragraph we stay away from the technical side of things, and touch upon some general points as they relate to a planned approach to traffic law enforcement. These points are:

- co-operation between parties to enable or improve the total monitoring process;
- monitoring of the total enforcement chain (not just policing and behaviour statistics);
- availability of (government) statistics for research purposes.

First, let's begin to describe the situation when quantitative targets have been set. After quantitative targets for police enforcement have been set, police should work out an enforcement strategy to achieve these targets and police, policy makers and researchers



together should agree on the monitoring system that is needed. Records of police activities (e.g. man hours spent on speed checks, or number of registered alcohol offenders) may be used as one kind of input to evaluate police effectiveness, but experience shows that these police records are often not available, reliable, systematic, or relevant enough for objective monitoring purposes. Therefore a separate research instrument or monitoring instrument should be developed. For example, experience in Netherlands, Finland and France has shown the importance of yearly roadside surveys of drinking-and-driving. This survey is important in three ways:

1. It shows development of drinking-and-driving over time and shows whether the target has been reached. Moreover, the results are used -in publicity - to sharpen political, public and police awareness of the development of this problem.
2. It shows regional variation in the problem so that the regional targets may be refined.
3. The close co-operation between police and researchers often results in very helpful, specific recommendations to improve enforcement operations in the field.

In the fifteenth year tradition of Dutch research in drinking-and-driving many recommendations have been given to the central Dutch government on how to take measures to improve police operations in the streets. These recommendations have included the use of equipment, organisation of police resources, legal aspects of the police competence in handling violators etc.

In addition to the technical guidelines provided by Gelau et al. (2000), we recommend the following in the field of monitoring:

- Monitoring of traffic behaviour should receive a higher priority on the national and regional level, since behavioural data are needed to complement accident data in order to arrive at valid conclusions about effectiveness of traffic law enforcement.
- Monitoring of traffic behaviour should be done based on scientific method of sampling and registration rather than on basis of existing police records.
- Preferably monitoring of traffic behaviour should be done in close co-operation between police, policy makers and non-commercial scientific institutes (Universities, national road safety institutes, police research institutes). At the highest governmental or political levels such research efforts should be stimulated rather than suppressed or ignored. If co-operation is difficult to realise at the national level, then it should be realised at some regional levels.
- If monitoring on a national scale proves costly or difficult, then monitoring at least should be done in some specially selected provinces or regions.
- We recommend that the following parameters of the enforcement system are monitored, be it at the national level or at specially selected regional levels: perception of police controls and penalties by the public, acceptance of the system by the public, perceived justice of penalties and procedures, willingness to co-operate with the system e.g. by paying tickets), costs in time and money of the judicial and administrative system, benefits such as time and costs “saved”, mean processing time of offence, number of court cases and administrative cases; average time/costs per case, number of appeals.



- Yearly statistics about the inputs and outcomes of the total traffic enforcement chain should become available in integrated evaluative reports that contain some explanation of reliability of statistics and some interpretative comments on changes. On the national level, the different Ministries involved should co-operate in this evaluative effort.
- The data of point systems and administrative legal systems should as standard be made available for scientific research, provided privacy rights are protected.
- Countries where point system is under consideration should make provisions for the research needs that are necessary to evaluate the workings of the system.
- A special European law should be introduced that permits the (small-scale) use of new legal or administrative enforcement measures or instruments for purposes of policy relevant field experiments.

## **6.7 OVERVIEW OF RECOMMENDATIONS**

In this paragraph we give an overview of all the recommendations. The reader should be aware that these recommendations can not have the same relevance for all European countries. An example may illustrate this. In countries where overloading of courts and police with traffic cases is so large that prosecution and sentencing practices are seriously hampered, it may be considered to introduce administrative procedures or administrative law. In other countries where this particular problem does not occur, the argument for administrative procedures or administrative law is evidently far less strong.

- 1 To integrate various support systems for police enforcement in one overall program, a planned multi-year approach to police enforcement should be set up.
- 2 A planned approach to police enforcement can only function at a regional level where fastness of decision-making and tactical and operational decisions can be taken in response to changes in traffic situations or special events or developments.
- 3 All parties involved in the enforcement chain should be involved in the planned approach.
- 4 A planned approach to police enforcement should as standard incorporate three equally important domains: (a) conditions for acceptance, (b) conditions for deterrence and (c) monitoring of results.
- 5 In the short term (say halve year or one year), evaluation of police enforcement should be guided as much or even more by behavioural data rather than only accident data.
- 6 Sets of laws and rules that were devised decades ago should be periodically revised to assess whether they still are relevant and clear to modern day traffic situations. Each rule should be checked to assess whether the situations to which it refers are outdated, whether the arguments for the prescribed behaviour still hold and whether this behaviour can be prescribed in more detail.



- 7 Under a criminal law system, it is advisable to carry out periodic surveys of judging practice, in order to ascertain the discrepancies between the police deterrence practice and actual punishment of violators.
- 8 In regard to the latest technological developments, legislation ought to be reassessed and reviewed throughout Europe making it possible to introduce new technical solutions as well as making better use of existing ones as enforcement support systems.
- 9 It is recommended to create explicit agreement between various actors (legislators, police, prosecuting bodies) about the consequences that follow detection of offenders.
- 10 We recommend that the administrative notifications of traffic offences is combined with more personalised messages to the traffic offender, explaining the risks of the behaviour or location.
- 11 If it is decided to introduce automatic enforcement (under the criminal law system), it should be seriously considered to support this type of enforcement by wide application of fixed penalty notices and special administrative procedures for their treatment.
- 12 One possible way to reduce overload of the police and justice systems is to allow more traffic regulation infringements to be treated under administrative law. In that case, the development of (administrative) support systems ought to decrease the burden of courts and the police rather than vice versa.
- 13 Yearly statistics about the inputs and outcomes of the total traffic enforcement chain should become available in integrated evaluative reports that contain some explanation of reliability of statistics and some interpretative comments on changes. On the national level, the different Ministries involved should co-operate in this evaluative effort.
- 14 Legal systems should as a standard, provide the use of different categories of rehabilitation programs as alternative sanction for heavy fines, license withdrawal or prison sentence. At present only some European countries provide for this alternative sanction.
- 15 More uniform sanction systems also based on the perceived fairness of drivers ought to be sought for and developed in Europe. Some new sanctions or special sanctions may be accepted more easily if they are introduced on an European scale.
- 16 Tailoring sanctions to meet individual requirements needs further development. Care should be taken that administrative procedures or administrative law do not take attention away from special traffic offences that need careful scrutiny as to underlying behavioural causes. The possibilities or criteria for optimal differentiation of offences and accompanying sanctions should be a point of persistent interest.
- 17 Finally, EU societies should encourage the use of new technologies to prevent drivers from committing violations and decrease the burden of legal systems and the police. Road transport systems ought to be developed in a way that will make driver control systems unnecessary.



- 18 Monitoring of traffic behaviour should receive a higher priority on the national and regional level, since behavioural data are needed to complement accident data in order to arrive at valid conclusions about effectiveness of traffic law enforcement.
- 19 Monitoring of traffic behaviour should be done based on scientific method of sampling and registration rather than on basis of existing police records.
- 20 Preferably monitoring of traffic behaviour should be done in close co-operation between police, policy makers and non-commercial scientific institutes (Universities, national road safety institutes, police research institutes). At the highest governmental or political levels such research efforts should be stimulated rather than suppressed or ignored. If co-operation is difficult to realise at the national level, then it should be realised at some regional levels.
- 21 If monitoring on a national scale proves costly or difficult, then monitoring at least should be done in some specially selected provinces or regions.
- 22 We recommend that the following parameters of the enforcement system are monitored, be it at the national level or at specially selected regional levels: perception of police controls and penalties by the public, acceptance of the system by the public, perceived justice of penalties and procedures, willingness to co-operate with the system e.g. by paying tickets), costs in time and money of the judicial and administrative system, benefits such as time and costs “saved”, mean processing time of offence, number of court cases and administrative cases; average time/costs per case, number of appeals.
- 23 Yearly statistics about the inputs and outcomes of the total traffic enforcement chain should become available in integrated evaluative reports that contain some explanation of reliability of statistics and some interpretative comments on changes. On the national level, the different Ministries involved should co-operate in this evaluative effort.
- 24 The data of point systems and administrative legal systems should as standard be made available for scientific research, provided privacy rights are protected.
- 25 Countries where point system is under consideration should make provisions for the research needs that are necessary to evaluate the workings of the system.
- 26 A special European law should be introduced that permits the (small-scale) use of new legal or administrative enforcement measures or instruments for purposes of policy relevant field experiments.



## Glossary of terms used

**Adjudication** refers to the process whereby a sanction is imposed upon an apprehended law offender.

**Administrative law** refers to a legislative system in which traffic violators are not prosecuted. No judgement is made of the detected violation; it is directly administratively sanctioned. The administrative sanction cannot include liberty penalties but can apply the loss or restriction of rights (driving licence). It mostly uses financial penalties with fixed or unfixed amounts.

**Administrative procedure.** In some countries, e.g. Great Britain, where most road offences remain part of the *criminal code*, there are procedures, which allow part of them to be treated in a mostly administrative way. Such is the practice in Great Britain where fixed financial penalty notices are given to violators detected by automatic speed and red light cameras.

**Alternative sanction** refers to the possibility to impose measures other than strictly traditional judiciary penalties (financial or licence revocation). A rehabilitation programme for traffic law offenders is the most common example of an alternative sanction.

**Criminal law or code** refers to a system in which traffic violations are processed under criminal law. This process usually follows three separate stages: detection, prosecution and sanctioning. Each stage passes through the hands of a specific competent body such that the sanctioning of an offence is linked by the police, public prosecutor and judge interventions up to the sentencing. In criminal law, usually a large range of penalties can be imposed, from the loss or restriction of liberty (prison penalty) or rights (driving licence), to financial penalties (day-fine, fine-unit, fines based on the offender's social status). Provisions of legal procedure are used for controlling the validity of the detection and prosecution stages (possibility to lodge an appeal).

**Detection** is referred to as the process in which the commission of a violation is established. This can for instance be done using specialised equipment, such as radar or breathalyser.

**General deterrence** can be described as the impact of the threat of legal punishment on the public at large. It results from a perception of the public that traffic laws are enforced and that a risk of detection and punishment exists when traffic laws are violated.

**Police enforcement** can be regarded as the actual work of monitoring violations of (traffic) laws, apprehending offenders and securing evidence needed for prosecution.

**Prosecution** is the act of instituting legal proceedings against a suspected traffic offender. The prosecution procedure should ensure that the evidence against the suspected offender satisfies legal requirements and ensure that the suspected offender is notified of the proceedings or the sanction and the possibility to lodge an appeal.



**Specific deterrence** can be seen as the impact of actual legal punishment on those who have been apprehended. It arises from actual experiences with detection, prosecution and punishment of convicted offenders. It is in fact based on the same underlying mechanism as general deterrence. However the population which it refers to is different.

The concept of **Traffic law enforcement** covers the entire procedure designed to persuade road-users to observe traffic laws and regulations through the threat of detection of a violation and the subsequent imposition of a penalty. Enforcement of traffic laws is intended to influence the behaviour of road users in such a way that their risk of becoming involved in a traffic accident decreases



## REFERENCES

- Andenaes, J. (1977). The Moral or Educative Influence of Criminal Law. In J.L Tapp and F.J. Levine (Eds.), *Law, Justice and the Individual in Society: Psychological and Legal Issues*, Holt, Rinehart and Winston, New York.
- Anderle F.G.: Reizsuche und Extraversion als Prädiktoren verkehrsauffälligen Verhaltens bei Fahranfängern. *Driver Improvement - 6. Internationaler Workshop*. Referate des Workshops 1997. Berichte der Bundesanstalt für Straßenwesen, Mensch und Sicherheit. Heft M 93, p. 257-260, Bergisch Gladbach, 1998.
- Armour, M. (1984). A review of the Literature on Police Traffic Law Enforcement. *Australian Road Research*, 14, pp. 17-25.
- Axelrod, R. (1987). *Die Evolution der Kooperation*. München: Oldenbourg.
- Bartl, G., Esberger, R., Brandstätter, Ch.: Unfallbilanz nach fünf Jahren Führerschein auf Probe. *Zeitschrift für Verkehrsrecht*, 42 (9), 1997.
- Bartl, G., Evers, C., Hatakka, M., Keskinen, E., Panacchi, M.: *DAN – Description and Analysis of post Licensing Measures for Novice Drivers*. Austrian Road Safety Board, Vienna, in preparation.
- Bartl, G., Esberger, R. & Brandstätter (1997). Unfallbilanz nach fünf Jahren Führerschein auf Probe. *Zeitschrift für Verkehrssicherheit*, 42, 317-321.
- Beyleveld, D. (1980). *A bibliography on general deterrence*. Saxon House, Westmead Farnborough.
- Biecheler, M.B. (1998). Evaluation de l'expérience de suivi des conducteurs alcoolisés dans le Val d' Oise, Rapport sur convention DSCR/INRETS n°9812, Paris Cedex, France.
- Blomquist, G.C. (1986). A utility maximization model of driver traffic safety behavior. *Accident Analysis and Prevention*, 18, pp. 371-375.
- Brouwer, F. and Heidstra, J. (1998). *Educatieve Maatregel Snelheid. Evaluatierapport*. Amsterdam: Dienst Verkeerspolitie Amsterdam
- Cameron, M.H., Cavallo, A., & Gilbert, A.(1992). Crash-based evaluation of the speed camera program in Victoria 1990-1991. Phase 1: general effects. Phase 2: effects of program mechanisms. Clayton, Vic., Monash University, Accident Research Centre ARC, 1992, Xii +63 + 42 p., ARC report No 42.
- Casey, S.M., & Lund, A.K. (1993). The effects of mobile roadside speedometers on traffic speeds. *Accident Analysis and Prevention*, Vol 25, no. 5, pp. 627-634.



Center for Compliance with Traffic Rules (1998). Report and vision 1992-2000 (In Dutch). Driebergen, Netherlands.

Christ, R. (1996). *Evaluation of measures in Austria to reduce the risk of young drivers*. Paper presented at the ICTTP Conference, Valencia May 22-25, 1996.

Christ, R. (1999). Driver improvement courses for novice drivers in Austria - What determines the effect? Paper KfV, 16-09-99.

Christ, R. (1999). *Driver Improvement courses for novice drivers in Austria - what makes them work?* Paper presented at the AEPSAT conference in Angers, 1999.

Christ, R., and Brandstätter, Ch.(1998). Evaluation der Nachschulung in Österreich. *Driver Improvement - 6. Internationaler Workshop*. Referate des Workshops 1997. Berichte der Bundesanstalt für Straßenwesen, Mensch und Sicherheit. Heft M 93, p. 275-283, Bergisch Gladbach..

Christ, R., and Brandstätter, Ch. (1997). Determinanten der Effizienz von Nachschulungsmaßnahmen bei Fahranfängern in Österreich. In: Schlag, B. (Ed.) *Fortschritte der Verkehrspsychologie 1996*. 36. bdp Kongreß für Verkehrspsychologie, Dresden. Deutscher Psychologen Verlag.

Christ, R, and Brandstätter, Ch. (1999): *Basisanalysen zur Nachschulungsevaluation*. Kuratorium für Verkehrssicherheit, Wien, unveröffentlicht.

Christ, R.(2000): *Driver Improvement courses for novice drivers in Austria – what determines the effect?* RTS-English issue (in press).

Christiansen, I. (1998). Life Style and Traffic safety. *Driver Improvement - 6. Internationaler Workshop*. Referate des Workshops 1997. Berichte der Bundesanstalt für Straßenwesen, Mensch und Sicherheit. Heft M 93, p. 165-170, Bergisch Gladbach, 1998.

Corbett, C, Simon, F. and O’Connell, M. (1998). The court’s role in sentencing speeding drivers. Chapter 7 in: The deterrence of high speed driving: a criminological perspective, TRL Report 296.

Delhomme, P, and Meyer, T. (1998). Do preventive messages enhance comparative optimism? *Driver Improvement - 6. Internationaler Workshop*. Referate des Workshops 1997. Berichte der Bundesanstalt für Straßenwesen, Mensch und Sicherheit. Heft M 93, p. 151-164, Bergisch Gladbach, 1998.

Elliot, B. (1993). Road Safety Mass Media Campaigns. A Meta Analysis. Report CR 118. Canberra, Federal Office of Road Safety.

ETSC (1999). Police Enforcement Strategies to reduce traffic casualties in Europe. Brussels, European Transport Council.



Gelau, C., Gitelman, V., Jayet, M.-C., and Heidstra, J. (2000). Development of guidelines for monitoring routine enforcement. Working paper 12 ESCAPE. Project funded by the European Commission under the Transport RTD Programme of the 4th Framework Programme.

Gibbs, J.P. (1975). *Crime, punishment and deterrence*. New York: Elsevier

Goldenbeld, Ch. (1995). Police enforcement: theory and practice. In: PTRC Education and Research Services, Traffic Management and Road Safety. Proceedings of Seminar G. PTRC Education and Services LTD, London.

Goldenbeld, Ch. (1996). Measures to increase traffic law acceptance: some strategic considerations. Paper presented at the 5th European workshop 'New developments in traffic safety research', Bern, May 2-3, 1996.

Goldenbeld, C., Jayet, M.C., Fuller, R. and T. Mäkinen (1999). Enforcement of traffic laws. Review of the literature on enforcement of traffic rules in the framework of GADGET Worl Package 5. SWOV, INRETS, TCD, VTI.

Hakkert, A.S. (1994). Traffic law enforcement and road user behaviour. Leidschendam: SWOV-report A 94-21.

Hansjosten, E., Schade F.-D. (1997). *Legalbewährung von Fahranfängern*. Berichte der Bundesanstalt für Straßenwesen: Mensch und Sicherheit, Heft M 71. Bergisch Gladbach, 1997.

Hansjosten, E. & Schade, F.-D. (1994). Wissenschaftliche Begleitforschung zur Fahrerlaubnis auf Probe. Schlußbericht zum Forschungsprojekt 8311/42 der Bundesanstalt für Straßenwesen, unpublished.

Hansjosten, E. & Schade, F.-D. (1997). Legalbewährung von Fahranfängern. Berichte der Bundesanstalt für Straßenwesen, Heft M 71.

Hatakka, M., Keskinen, E., Katila, A. (1997). Do the psychologists have to offer something in driver training, driver improvement and selection? In: Spoerer, E. (Ed.) *Assessing the driver*. Faktor Mensch im Verkehr, 41, p. 49-58, Braunschweig, 1997.

Holland, C.A. & Conner, M.T. (1996). Exceeding the speed limit: an evaluation of the effectiveness of a police intervention. *Accident Analysis and Prevention* Vol. 28, no. 5, pp. 587-597.

Houten, R. van & Nau, P.A. (1983). Feedback interventions and driving speed: parametric and comparative analysis. *Journal of Applied Behavior Analysis* 16, 253-281

Home Office (1998). Offences relating to motor vehicles England and Wales 1996, Supplementary tables, Home Office, London.

HMIC (1998). Road policing and traffic, HMIC (Her Majesty's Inspector of Constabulary) Thematic Inspection Report, Home Office, London.



Homel (1993). ....

Huguenin (1979) ....

Jacobshagen, W. (1997). Nachschulungskurse für alkoholauffällige Fahranfänger (NAFA) – Kurspraxis, Wirksamkeit und Akzeptanz. Köln: Verlag TÜV Rheinland.

Jacobshagen, W. (1998). Nachschulungskurs für alkoholauffällige Fahranfänger nach dem Modell NAFA in Deutschland: Klientel, Kursdurchführung, Wirksamkeit und Akzeptanz. In: Driver Improvement 6. Internationaler Workshop. Berichte der Bundesanstalt für Straßenwesen, Heft M 93.

Jagow, J. (1998). Gesetz zur Änderung des Straßenverkehrsgesetzes und anderer Gesetze vom 24. April 1998. Deutsches Autorecht, 67, 186-190.

Jagow, J. (1999). Punktsystem auf gesetzlicher Basis. Fahrschule, 2/99, 24-27.

Job, R.F.S. (1993). *The problem of risk taking with increased education and skill*. The proceedings of the fourth biennial Australian traffic education conference. NSW: EMU Presse, Armidale, 1993.

Koßmann, I. (1996). Polizeiliche Verkehrsüberwachung. Berichte der Bundesanstalt für Straßenwesen, Heft M 67.

Kroj (1981) .....

Machemer, E, Runde, B, Wolf, U, Büttner, D, & Tücke, M (1995): Delegierte Belohnung und intensivierete Verkehrsüberwachung im Vergleich. Bergisch Gladbach: Bundesanstalt für Straßenwesen (Berichte der Bundesanstalt für Straßenwesen, Heft M48)

Mäkinen, T., Jayet, M.C. and D. Zaidel (1999). Legal measures and enforcement. Deliverable 5. Gadget.

Mayntz, G. (1998). Verhaltensbeeinflussung bei Fahranfängern zur Reduktion des Unfallrisikos – Vorschläge zur Einführung einer zweiphasigen Fahrausbildung. In: Driver Improvement 6. Internationaler Workshop. Berichte der Bundesanstalt für Straßenwesen, Heft M 93.

Meewes, V. & Weissbrodt, G. (1992). Führerschein auf Probe – Auswirkungen auf die Verkehrssicherheit. Schriftenreihe der Bundesanstalt für Straßenwesen, Unfall- und Sicherheitsforschung Straßenverkehr, Heft 87.

Ministry of Transport and Waterworks (1995). The Manual Traffic Enforcement (In Dutch language). Police Traffic Institute, Apeldoorn, The Netherlands.

Michalke, H., Barklik-Chory, Ch., Brandstätter, Ch.: *Driver Improvement - Effizienzkontrolle von Gruppentrainingsmaßnahmen für alkoholauffällige Kraftfahrer*. Kuratorium für Verkehrssicherheit, Institut für Verkehrspsychologie, Wien, 1987.



Muskaug, R. & Christensen, P.(1995). The use of collective feedback to reduce speed. Institute for Transport Economics, 1995 (TØI Working report 995/1995).

Noordzij, P. (1976), Influencing road users' behaviour. SWOV-Report 76-4e, Voorburg, The Netherlands.

Noordzij, P. (1988), The role of traffic rules, In: SWOV Institute for Road Safety Research, A century of automobiles: Past, present and future of automotive safety, SWOV, Leidschendam, the Netherlands.

Onneweer, A.W. (1997). Effecten van bestuurelijke boetes: een vergelijking van strafrechtelijke en bestuurlijke handhaving van verkeersvoorschriften. Proefschrift Rijksuniversiteit Groningen, RUG, Groningen. Kluwer, Deventer, the Netherlands.

Oei, H.L (1998). The effect of enforcement on behaviour. Deliverable 3. Project MASTER. Report D-98-8. SWOV, Leidschendam, The Netherlands.

Onneweer, A.W. (1997). Effecten van bestuurelijke boetes: een vergelijking van strafrechtelijke en bestuurlijke handhaving van verkeersvoorschriften. Proefschrift Rijksuniversiteit Groningen, RUG, Groningen. Kluwer, Deventer, the Netherlands.

Openshaw, P. (1997). The British penalty Points System. Department of the Environment, Transport and the Regions, UK, December 1997.

OPPATA (1986).....

PACTS (1999). Road traffic law and enforcement: a driving force for casualty reduction. PACTS - Parliamentary Advisory Council for Transport Safety, July 1999.

Rooijers, A.J.(1988). De invloed van verschillende voorlichtingstechnieken op het snelheidsgedrag van automobilisten. Netherlands, Haren: Traffic Research Centre Report VK 88-09. PACTS (1999). Road traffic law and enforcement: a driving force for casualty reduction. London: Parliamentary Advisory Council for Transport Safety.

Ross, H.L. (1990). Reducing drinking-driving by individuals through enforcement. In: Koornstra and Christensen (Eds.), Proceedings of the International Road safety Symposium in Copenhagen, Denmark, September 19-21, 1990. SWOV, Leidschendam, the Netherlands.

Rothengatter, J.A. (1991a). Automatic Policing and Information Systems, In: M.J. Koornstra en J. Christensen (Eds.), Enforcement and Rewarding: Strategies and Effects, SWOV, Leidschendam, Netherlands.

Schulze, H., Assailly, J.-P., Bartl, G., Simpson, H. Twisk, D.A.M. and G. Yannis (1999). PROMISING. Promotion of Measures for Vulnerable Road Users. Young Drivers. Final Report of Work Package 4. Deliverable P.4-Hune 1999.



Schulze, H.: *Lebensstil, Freizeitstil und Verkehrsverhalten 18- bis 34jähriger erkehrsteilnehmer*. Berichte der Bundesanstalt für Straßenwesen: Mensch und Sicherheit, Heft M 103. Bergisch Gladbach, 1999.

Schützenhöfer, A.: "Verkehrsauffällige", ein psychologisches oder pädagogisches Problem? In: Schlag, B. (Ed.). *Fortschritte der Verkehrspsychologie 1996*. 36. bdp Kongreß für Verkehrspsychologie, Dresden. Deutscher Psychologen Verlag, 1997.

Siegrist, S. (Ed.), (1999). Learning to become a driver – what can be done? Final report on Work Package 3 of the EU-project GADGET. BfU, Bern, Austria.

Skinner, B.F. (1988). *Beyond freedom and dignity*. Peregrine, London, UK.

Spoerer, E. & Kratz, M. (1991). Vier Jahre Erfahrung mit der Nachschulung von alkoholauffälligen Fahranfängern (Inhaber einer Fahrerlaubnis auf Probe). *Blutalkohol*, 28, 333-342.

Spoerer, E. & Ruby, M.M. & Siegrist, S. (Hrsg.) (1994). *Nachschulung und Rehabilitation verkehrsauffälliger Kraftfahrer – Dokumentation von Kursen und Literatur zum Driver Improvement, 2., aktualisierte Aufl.* Braunschweig: Rot-Gelb-Grün, Faktor Mensch im Verkehr, Heft 35.

Schade, F.-D. (1998). Das Kriterium der Legalbewährung nach Daten des Verkehrszentralregisters. In: *Driver Improvement 6. Internationaler Workshop, Berichte der Bundesanstalt für Straßenwesen, Heft M 93*.

Schäpe, M. (1999). Für die Praxis – Das neue Punktesystem im Überblick. *Deutsches Autorecht*, 68, 92-94.

Schützenhöfer, A., Krainz, D.: *Recidivism rate of alcohol offenders in relation to BAC level*. Paper presented at the AEPSAT conference in Angers, 1999.

Stafford, M.C., Gray, L.N., Menke, B.A. and D.A. Ward (1986). Modeling the deterrent effects of punishment. *Social Psychology Quarterly*, 49, p. 338-347.

Stephan, E. (1984). Die Rückfallwahrscheinlichkeit bei alkoholauffälligen Kraftfahrern in der Bundesrepublik Deutschland – Die Bewährung in den ersten 5 Jahren nach Wiedererteilung der Fahrerlaubnis. *Zeitschrift für Verkehrssicherheit*, 30, pp. 28-33.

Stephan, E. (1997a). Eignungsbeurteilung, Verhaltensprognose oder Krankheitsdiagnose. In: *Kongressbericht 1997 der Deutschen Gesellschaft für Verkehrsmedizin e.V., 29. Jahrestagung, Münster, 19-22 March, 1997*. Berichte der Bundesanstalt für Strassenwesen: Mensch und Sicherheit, Heft M 92, p. 32. BAST, Germany.

Stephan, E. (1997b). Zufriedene Alkoholabstinenz bei Nichtabhängigen: ein realistisches Ziel psychologischer Intervention? In: *Driver improvement: 6. Internationaler Workshop: Referate des Workshops 1997, Berlin, 20-22 October 1997*.



Berichte der Bundesanstalt für Strassenwesen: Mensch und Sicherheit. Heft M 93, pp. 367-377. BAST, Germany.

Taylor, M. (1987). *The Possibility of Cooperation*. Cambridge University Press.

Tittle, C.R. (1980). *Sanctions and social deviance: the question of deterrence*. Praeger, New York.

Tücke, M, & Wolf, U. (1995): Formelle Kontrolle durch die Polizei und soziale Beeinflussung durch Delegierte Belohnung im Straßenverkehr. In: Berufsverband Deutscher Psychologen (Hrg.): 18. Kongreß für Angewandte Psychologie, Abstractband. Bonn: Deutscher Psychologen Verlag, 318-319

Tücke, M. & Wolf, U. (1996). Reduzierung von Geschwindigkeiten im ländlichen Raum durch "delegierte Belohnung" und/oder intensivierete polizeiliche Überwachung. In: BFU/BPA/UIP (1996). Conference Folder. 3 May 1996. V. European Workshop on Recent Developments in Road Safety Research.

Twisk, D.A.M. and Wittink, R. D. (1994) Proposal for a point demerit system in Hungary. Report 94-13. SWOV, Leidschendam.

UK-input (1998). Information about enforcement system in the UK. Input provided for work package 5, GADGET.

Utzelmann, H.D., Haas, R.: Evaluation der Kurse für mehrfach auffällige Kraftfahrer. *Unfall- und Sicherheitsforschung Straßenverkehr*, Nr. 52. Im Auftrag des Bundesminister für Verkehr von der Bundesanstalt für Straßenwesen, Bergisch Gladbach, 1985.

Utzelmann, H.D., Jacobshagen, W.: Validation of the German system of diagnosis and rehabilitation for traffic offenders. In: Rothengatter, T., Carbonell Vaya, E. (Eds.): *Traffic and Transport Psychology. Theory and Application*, p. 435-444, Pergamon, 1997.

VERA-project (1999). VERA - Video Enforcement for Road Authorities. Deliverable 3.2. Legal, Operational and Organizational Issues in Enforcement (Approaches to Harmonisation and potential Solutions). Version 6. November 1999

Vissers, J.A.M.M., Hoff, J.P. van 't (1998). Effecten van de EMA: een evaluatieonderzoek naar de leereffecten van de Educatieve Maatregel Alcohol en Verkeer. Veenendaal Traffic Test. Report TT 98-26.

Wagner, W. & Vierboom, C. (1988). Untersuchung zur Optimierung des Nachschulungskurses für Fahranfänger - Begleituntersuchung. Untersuchungsbericht für den Deutschen Verkehrssicherheitsrat.

Winkler, W., Jacobshagen, W., Nickel, W.-R.: Wirksamkeit von wiederholt alkoholauffälligen Kraftfahrern. *Unfall- und Sicherheitsforschung Straßenverkehr*, Nr.



64. Im Auftrag des Bundesministers für Verkehr von der Bundesanstalt für Straßenwesen, Bergisch Gladbach, 1988.

Wolf, U, Tücke, M, & Machemer, E (1995): Geschwindigkeitsbeeinflussung im ländlichen Raum durch intensivierete polizeiliche Überwachung und delegierte Belohnung. Referat an der Polizeiführungsakademie Münster-Hiltrup.

Zaal, D. (1994). Traffic Law Enforcement: A review of the literature. Monash University Crash Research Centre. Report No 53. Canberra

Ziegert, U. (1999). Das neue Punktsystem. Zeitschrift für Schadensrecht, 20, 4-5.



## Appendix A:

### Traffic Law systems in Europe

#### Austria

In Austria violations are not a part of a criminal law. However, it might be that in single cases excessive speeding or related behaviour could be accused as menace for public safety. There are no special traffic courts in Austria. However, at administrative level there are specialised units for traffic matters. There are three levels - first at the district-authority (Strafreferat - officials dealing with punishment - and Entzugsreferat - officials dealing with withdrawal matters), second - at the level of the federal state (there "Unabhängige Verwaltungssenate" have been introduced which deal with traffic cases. As a third level the "Verwaltungsgerichtshof" (highest level of administrative decisions) can be appealed (no specialised units there).

Moreover, there is no point system so far in Austria, but it is under discussion. So far local authorities keep the record of the license holders and decide on withdrawals of licenses. If a point system is introduced the authorities who issue and withdraw the licenses will have to administer the system. The databases of all local authorities then would have to be linked.

Small offences are fined at the spot - direct payment to the police officer ("Organmandat" - usually smaller fine). If police is not present (automated enforcement) and smaller offences are set, the identity of driver is not inquired: a paying-slip is sent to the vehicle holder, if paid - no further consequence. Severe offences ("Anzeige"): inquiry who has driven the vehicle. The vehicle holder must give the information who has driven the car or be responsible. The driver may be requested to come to the police station for positive identification.

There are applied two kinds of fines in Austria:

- "Organmandate": the police officer stops the car because of a violation and gives the ticket to the driver, who pays the fine immediately in cash (the use of credit cards will be introduced within a few months). In case of automated enforcement paying slips have to be paid at the bank. These fines haven't any further consequences. The driver may be checked but his particulars *will not be recorded*.
- "Strafverfügungen" - information: the license holder gets the "Strafverfügung" by post. The amount is higher than owing to an "Organmandat".

Alcohol offences from 8000,- to 30000,- ATS (580,- to 2174,- ECU), amount depends on severity of offence and recidivism. There are no standardised provisions about the amount of the offences for all federal states. Much of the punishment is handled by Licensing authority and not the courts. The administrative actions may involve license suspension, compulsory re-education, compulsory driver improvement treatment, and physical and psychological re-assessment of fitness for a driving license. Drivers need to pay for all of these treatments.



License suspension in case of 1<sup>st</sup> alcohol offence:

- from 0,08 to 0,12 BAC minimum 4 weeks
- from 0,12 to 0,16 BAC minimum 3 months
- more than 0,16 BAC minimum 4 months

For speeding: 2 weeks suspension if limit is exceeded by more than 40 km/h in urban area and more than 50 km/h outside urban area.

Driver improvement:

Novice drivers - during probation period of 2 years (which can be increased up to 5 years):

- 5 group sessions when exceeding the 0,01 BAC level for novice drivers (490,- ECU)
- 4 group sessions and driving with a driving instructor after serious offence (490,- ECU)

All drivers:

- more than 0,12 BAC 6 group sessions (536,- ECU)
- more than 0,16 BAC medical and psychological examination (362,- ECU)

Medical and/or psychological examination is carried out when BAC is more than 0.16, or if there are other reasons for doubts on willingness to obey regulations or on psycho or medical requirements for driving.

## **Belgium**

Traffic violations (when not related to accidents) are without any exception a part of the criminal legal code in Belgium. All traffic matters are treated by the police courts. There are 83 police judges in Belgium. There is no de-merit point system for traffic violations in the country. The most common reasons for fines are alcohol, speed, seat belts and parking.

The police issue a ticket. For minor offences they can propose an immediate collection of the fine (Belgians have to pay with fiscal stamps, foreigners have to pay in cash). In most cases, police records a violation and the public prosecutor sends a ticket to the driver/ owner. The ticket can impose a fine, or request driver to appear in the police court. In the case of camera detected speed offences, the owner of the car has to identify the driver of the car.

Police officer can impose an immediate payment of the fine for minor offences like parking violations. Police officer may also impose on the spot prohibition to drive (3h or 6 h for drink driving). The prosecutor: transaction (fine) or driver improvement lessons (= alternative sanctions - on voluntary basis): withdrawal of driver licence. Police court (for severe offences): main sanctions = fine and/or imprisonment, additional sanction = driver license suspension or revocation. The law has defined minimum and maximum sanctions for each violation type. Judges can impose sanctions within these limits.



There is no de-merit point system in use in Belgium.

## **Czech Republic**

Traffic offences usually are not a part of criminal legal code, with two exceptions a) drink-driving, especially in case of professional driver, which is taken as general jeopardy b) not giving aid at a scene of an accident.

There are no specialised traffic courts and judges in Czech Republic, neither penalty point system - but recently, the licence withdrawal is possible for so called „loss of reliability“ (repeated dangerous violations). Since the amendment doesn't specify how many violations must be committed, it is not very useful.

A penalty point system is expected to be introduced in the year 2000. According to the decree 64/1998, in case that the driver commits more than two serious traffic offences within three years, Police may suspend the driving license until the administrative commission or court make a decision. The most common reasons for getting a citation are speeding, wrong overtaking, “wrong way of driving” (covers many items, such as lane use), and of course parking (mostly in competence of municipal police).

The Czech authorities used to be quite indifferent to safety problems including enforcement, and so was the public. A shift can be noted in since 1997.

The most important is the legal notice 99/1989, containing the duties of driver, including speed limits (from October 1997 it is 50km/h in built-up areas, 130 km/h on motorways and 90 km/h on other roads) and alcohol limit (0,00%).

The law about penalty point system is under preparation now. Enforcement is mainly based on fines. License withdrawal is quite rare (usually for alcohol).

Legislation leaves most decisions to police. The most common violations are resolved on the spot, by paying a fixed fine associated with the violation. Fines go up to 2000 CZK (55 ECU). The offence is registered in driver's record. (it used to be recorded in writing on the paper license itself, now it is centrally registered).

If a driver doesn't agree with fine, is not able to pay immediately, or a more serious violation was involved- the driver is invited to appear at the local (administrative) Traffic Police Inspectorate.

The officials of the Traffic Inspectorate and can impose and collect higher fines, withdraw licences and in exceptional cases impose [refer to a court?] a prison term. Police officers can, in severe cases, suspend a license on the spot, until the case is resolved by the Traffic Inspectorate. More complicated violation cases, appeals, and minor accidents are handled by a Regional Traffic Inspectorate. The courts handle serious accident cases, other criminal offences, and higher appeals. The tables below indicate that also in Czech Republic a great number of cases are treated on the spot and thus avoiding the lengthy treatment of cases in court. To some extent this procedure extends also to drink driving.



Type of violation	Solved on the spot	Not solved on the spot
Motor vehicles:		
Speeding	319208	135122
Overtaking	44350	814
Not giving right of way	23191	1219
Wrong way of driving	66069	2199
Parking	42677	66071
Other road users:		
Pedestrians	9827	166
Cyclists	9740	1818
Others	3021	359
Alcohol violations		
	Drivers of motor vehicles	Other road users
Number of registered offenders	11186	63
Number of licenses withdrawn	8219	6
Solved on the spot	1687	45
Not solved on the spot	9499	18
Unpaid motorway fees	28645	83
Other	228904	27376

## Denmark

Traffic violations in Denmark (when not related to accidents) are not part of the criminal legal code. There is a special legislation as regards traffic. The Road Traffic Act defines traffic regulations for all types of road users. Violations of the Road Traffic Act are punished with fines, ordinary imprisonment or prison dependent on the nature of the offence. An exception could be that the charge of violation of the Road Traffic Act is supplied with the penal code - e.g. when there is caused obvious danger for other people's life and health. Moreover, there are no specialised traffic courts nor judges in Denmark.

Most violations are settled by issuing a fixed fine to the driver. The fine can be paid at a police station or in a post office. If a driver does not pay the fine, or appeals, the case is brought before a regular court. A fine settles the majority of the offences against the Road Traffic Act. Parking violations are charged duty tax. If the duty is not paid the case will be brought before the bailiff – contrary to other traffic violations, which are brought before the court. Certain violations are treated under a criminal law. These include leaving the scene of an accident. Driving a vehicle without a proper license, driving while being suspended. In addition to fines violators could get prison terms. The table below gives the recorded statistics for 1997. It should be pointed out that a large number of small fines (less than 1.000 DK, payable at a police station or a post office) are usually not registered.



<b>Table A...: Violations/convictions of Road Traffic Act. Licence suspensions – 1997:</b>	
Type of violation	Number
Indictments/charges – drunken driving	12.516
Indictments/charges – all other violations	223.083
Decisions/convictions against drivers – drunken driving	10.911
Decisions/convictions against drivers not giving way	4.391
Decisions/convictions against drivers without driving licence	11.308
Decisions/convictions against drivers - with overloaded vehicle	7.550
Unconditional licence suspensions – drunken driving	7.550
Unconditional licence suspensions – reckless driving	190
Conditional licence suspensions – drunken driving	1.729
Conditional licence suspensions – speeding	779

## **Ireland**

There are no specialised traffic courts or judges in Ireland. The principal legal instruments in Ireland are a series of Acts of the Oireachtas (parliament) in 1920, 1961, 1968, 1993, 1994 and 1995. These are amplified and amended under a series of Bye-laws and Regulations made under the Acts. These Bye-laws and Regulations typically pertain to detailed aspects of road use such as vehicle lighting, insurance, speed limits, vehicle testing and so on. There is no special traffic code pertaining to traffic law. Breaches are classified as summary or non-indictable (i.e. not tried by jury) offences. As such, they may only be tried by a judge or magistrate (rapidly and without a jury).

Sanctions range from a verbal warning through to levels of fine, license endorsement, community service, disqualification and terms of imprisonment. Within this system there is an informal one which includes, at the level of detection, police discretion as to whether to proceed with a summons, and at the level of sentencing the replacement of a conviction with a donation to a charity. This latter is referred to as the "court poor box". There is controversy over its use because those who are rich enough to pay into the poor box will have a clean record, while those who cannot afford to pay face the full rigor of the law. An example of the operation of this system is a 23 year-old motor cyclist who drove for 7 miles at 131 mph (speed limit 70 mph). Although his case was proven he escaped conviction by donating £4000 to a charity. Between 1990 and 1998, 2,766 separate amounts have been paid to the Dublin Metropolitan Court poor box, although it is not possible to determine what proportion of these donations relate to traffic cases.

Another aspect to the penalty system is that known as the Petitions procedure, whereby the Minister for Justice may be petitioned on various exceptional grounds for the reduction or remission of fines imposed by the court. The greater proportion of petition applications have related to Road Traffic Offences. In 1994 there were 4,266 petitions, of which 52% were refused, 29% received a proposed partial mitigation of fine, 16% were granted an extended time to pay and 1.7% received full remission of the court



penalty. However, aspects of this procedure were challenged in the High Court in 1995 and the eventual ruling was that aspects of the power exercised by the Minister were *ultra vires*. In a recent written statement to the Dail (February 1998) the very restricted scope for intervention under the petitions procedure was clarified. In the area of traffic offences, petition applications cannot now be opened (i.e. taken) for convictions of disqualification, endorsement on driving license, community service orders, on-the-spot fine tickets and requests for extensions to pay fines or to pay by instalments. It is noteworthy that since the 1995 ruling the number of petition applications has dropped to 671 (1997), a fall of 84% on the 1994 total. Of these, only 21 (3%) were successful.

**De-merit point system is currently under consideration. New primary legislation will be involved.**

The normal procedure giving a citation is as follows: Gardai enforce traffic laws by stopping offending drivers, speaking to the offender and by taking punitive action: issuing a Fixed Penalty Notice (FPN) (currently for speeding, taxation, parking and display of insurance disk offences and formerly administered under a Fine on the Spot or FOS system), a summons to appear in court or an arrest. Payment of an FPN avoids prosecution. Payment is required within 14 days, followed by a reminder. This is in turn followed by a summons requiring the offender to appear in court to answer the charge (this happens in 20-25% of cases).

Processing of traffic cases in the Irish court system is fairly simple and straightforward. For many offences the magistrate currently has discretion regarding the nature and severity of the penalties imposed. However this flexibility is likely to decrease with the introduction of the new fixed penalty and points systems.

Annually about 470,000 FPNs (about 90% by traffic wardens as agents of the police) are issued. Most are for parking and tax related. Over 33% of all traffic offences detected are road tax/license revenue offences. Prosecutions can be delivered simply on a parked vehicle - there does not have to be personal contact between the offender and the enforcing agent.

The vast majority of summoned offences are brought to the District Courts. In 1996, nearly 60% of total proceedings initiated by the Gardaí in the District Courts related to alleged road traffic offences, many of them safety related. Prosecutions taken were as follows:

#### **Prosecutions for driving offences, 1995**

- Exceeding the speed limit 36,719
- Failure to wear seat belt 6,371
- Drink-driving 4,506
- Dangerous driving 3,300
- Careless driving 3,211
- Driving without reasonable consideration 2,189

Licenses may be endorsed (repeat endorsements will lead to disqualification), there may be discretionary disqualification or mandatory disqualification, the latter for certain



drink driving and repeat dangerous driving offences. The most common RT offences for which arrests are made are extreme cases (or out-of-state resident cases) of:

- dangerous driving;
- drunken driving (to give breath test and blood/urine test at Garda station);
- failing to give name and address when a traffic offence is alleged;
- dangerous parking.

The general picture is that for every one drink-driving prosecution there is:

- one dangerous (includes careless driving and driving without due-care and attention) driving prosecution
- three defective vehicle prosecutions
- six insurance prosecutions
- six speed offence prosecutions
- nine driving license prosecutions
- twenty road-tax offence prosecutions.

Gardai can often use their discretion as to whether or not to proceed with an FPN or other form of sanction. This approach seeks to educate and encourage, without compromising good police/community relations UK research indicates that the issue of a warning or advice is as effective as strict enforcement of the law (Home Office Research Study No.124).

## **Israel**

Traffic violations (when not related to accidents) are part of the criminal legal code in Israel. Parking tickets given by local wardens are the exception. Traffic courts constitute a separate part of the civil court system. There are judges who specialise in traffic laws. This specialisation is supported financially by the Road Safety Authority. Inside the Police there is as of 1998 a separation between traffic and general prosecution.

There is a de-merit point system in use in Israel. The Licensing Authority (Ministry of Transport) maintains a file of traffic violations, and administers the point system.

The total number of points in the traffic violation record of a driving license holder, is calculated on an ongoing basis, for a period of two years from the day on which the violation has been committed. Each violation carries six, four or two points. For 6 points, the driver is called to undergo a remedial driving course; for 10 points or more, the Licensing Authority may disqualify the license for a period.

The remedial courses cost money and are a big business conducted by a special semi-commercial government agency. The most common reasons for getting a citation are as follows:

- Parking - 223,956 (15.8% of the total)
- Speeding - 211,755 (15%);
- Non-compliance with traffic signs/lights, including “stop” and “yield” signs - 98,915 (7%);
- Safety belts unfastened - 83,995 (5.9%);
- Improper turn performance and lack of signalling - 74,815 (5.3%);



- Vehicle condition defects - 96,026 (6.8%);
- Technical violations - 261,236 (18.5%);
- Total (1997- final figure) - 1,414,753.

The common, normal procedure of informing-giving-sending drivers citations is as follows: A policeman issues a citation which is a fixed fine (associated with the alleged violation) and a summons to appear in court on a specific date. Drivers who wish to actually go to court must make their intention known by registered mail within 90 days. By paying the fine, drivers are regarded as having admitted to the violation in court, have been convicted, and paid the penalty. Demerit points are added to the record.

If the driver takes no action within 90 days, the fine is automatically doubled and continues so for every 90 days. All fines are paid, in cash, at the banking service of the postal service.

Serious violation may carry mandatory court appearance.

The Ministry of Transport with the concurrence of the Ministry of Justice set and update the level of fixed fines. There currently are 14 grades of fines related to the severity of the violation. Fines range now between 40-1000 NIS.

Police officer can disqualify for 30,60 or 90 days the license of a driver who performed a severe traffic violation, depending on the violation and the severity of an accident it appeared to have caused. This option is called "administrative disqualification", in 1997 12,138 actions of this type were performed. The Ministry of Transport with the concurrence of the Ministry of Justice set and update the level of fixed fines. There currently are 14 grades of fines related to the severity of the violation. Fines range now between 40-1000 NIS.

Each violation is associated with a given number of penalty points.

Police officer can disqualify for 30,60 or 90 days the license of a driver who performed a severe traffic violation, depending on the violation and the severity of an accident it appeared to have caused. This option is called "administrative disqualification", in 1997 12,138 actions of this type were performed.

## **Finland**

Law making and adjudication related to traffic are under the jurisdiction of the ministry of justice. The Public prosecutor's office handles court cases and provides legal guidance to police. Ministry of Transport regulates vehicles, roadways and drivers in administrative manner. The roadway administration (FINRA) of the Ministry of Transport assists in installing fixed cameras and provides the police with speed data from the whole network when needed. Finnish police are under the jurisdiction of the Ministry of the interior. Traffic violations (when not related to accidents) are part of the criminal code. There are no special traffic courts or judges in Finland. Finland has no formal demerit-point system, but in practice the licensing authority operates a "system



of progressive measures" for recurring violations, as follows (usually it is speeding violations that trigger the system):

- three violations in two years will automatically be followed by a warning letter or,
- two violations in one year will automatically be followed by a warning letter, and
- four violations in two years will be followed by a driving ban for a duration depending on the case
- three violations in one year will be followed by a driving ban of a certain length.

Driving ban is the usual consequence but also a warning may be possible. For example, a professional driver may get a warning or a short ban. The system includes also (if required by the police) a personal visit to a local police for a discussion concerning these frequent violations. There is a study going on the effects of this procedure.

Minor offences such as neglecting to fasten a seat belt are not included in the system. On the other hand, infringements not directly risky, such as caught for using a radar detector, are included in the system of progressive measures.

For novice drivers the system of progressive measures will be triggered one violation earlier than for more experienced drivers. This tighter system of progressive measures will last at least 1.5 years, during the first phase of the two-phase graduated driver licence system, which is in place in Finland.

Most citations (parking excluded) are handed to driver in person. In the case of automatic enforcement, driver identification is required; owner / driver receives an invitation to appear in a local police station to be identified.

Most violations are settled by payment of fines. The Finnish system has two types of fines. For minor violations, such as neglecting the use of a seat belt or excess speed up to 20 kms over the posted limit, small fixed amount of money with no court redress. For more serious violations fines are individually tailored taking into consideration the seriousness of an offence, the gross income of a driver and his/her social situation. Drivers, by reporting lower income, circumvent this procedure, instituted to be socially fair. Lying to the police officer about the income was made punishable offence only in January 1999. In the following the data are about all citations by type citation issued in Finland (1997):

- Total No. of citations (parking excluded) 377,500 100%
- Citation carries variable fine, 300,000 80%
- (drivers may opt court but most don't)
- Citation carries small fixed fine 49,500 13%
- (minor offences with no court redress)
- Citation carries mandatory court 28,000 7%
- Over 190 000 of the violations are issued for speeding and about 25 000 for drink driving.

## France

In France the Highway Code is part of the penal code. Criminal law identifies 3 categories of violations depending on the applicable penalties: crime, indictable offence



and minor offence. Road traffic offences are all either indictable offences or minor offences.

The legal measures in the penal code and the Highway Code (laws) are passed by Parliament (crimes and indictable offences). The penal code was revised in 1994. The new code creates a new reason for prosecution and conviction in the area of road traffic which is "endangering others". It also adds the option of "alternative" punishments for the principal penalty in the place of conventional punishments such as prison or fines: community service, various remedial courses and medical care in the case of drug dependency. The laws and regulations in the Highway Code are frequently revised, either to impose stronger detection and enforcement measures (for alcohol and speed) or to add to regulations (seat belts, crash helmets, children, and young drivers). For example, parliament has voted ten times to revise the law on drink driving.

Non compliance with Regulatory measures defined by governing authorities is usually minor offence. Minor offences constitute the majority of road traffic offences and are subdivided into 5 severity categories.

Indictable road traffic offences require appearance in criminal court. The most common are the following: illegal alcohol level, refusal to submit to alcohol testing, manifest drunkenness, obstruction or attempted escape, use of the highway for illegal purposes, falsification of registration plates, repetition of the offence of driving without a licence, repetition of the offence of breaking the speed limit by more than 50 km/h.

The criminal punishment system distinguishes: (a) Severe crimes which are punished very severely and tried at the Assizes. (b) Indictable offences which are in principle punishable by imprisonment and fines in excess of 25,000 FF. They are tried in the criminal courts.

(c) Minor offences (5 categories), which in principle are tried in police courts, but in most cases are dealt with a simplified penalty fixed penalty procedure up to 10,000 FF. The level of the fixed fine is determined by the category to which the minor offence belongs.

In the simplified fixed fine procedure which applies to the first four categories of minor offence, the form which states the offence and fine is

- either presented to the driver on the spot (interception)
- or sent through post (photograph or radar and photograph)

The fine may be paid either immediately to the police (interception) or into public funds within 3 days following the interception or reception of the postal notification: in this case the fine is reduced. The ordinary payment limit is 30 days: when this period is exceeded the police send details of the offence to the Public Prosecutor for him to ensure payment: in this case the fine is increased. The Fines range from 250 FF to 5000 FF.



The fixed fine removes the need for court action (the criminal procedure is the same as the administrative procedure). The driver (but also the Public Prosecutor) can oppose the fixed fine: the case is then sent to be heard in the Police court.

There is a variety of ways in which drivers can pay fines: by an excise stamp on sale at tobacconists, by check, by post office transfer.

There are no special courts or special judges for trying road traffic offences. A criminal court, for indictable offences, and the police court, for minor offences, hear cases. The magistrates (about 6000 in number) in these penal courts consist of

- judges, who are independent from the public prosecutors. Criminal courts often have three judges sitting.
- public prosecutors and their assistants, who are responsible to the Minister for Justice.

The police court, which deals with minor offences, consists of a single judge. The public prosecutor is represented by an assistant public prosecutor for Category 5 offences and by an officer from the Criminal Investigations Department (Superintendent Rank) for the first 4 categories.

It is the procedures for prosecution, judgement and punishment that are specific to road traffic offences. The normal procedures have been modified in order to deal more rapidly with the ever-growing volume of road traffic offences and to overcome the inevitable clogging of the legal process of prosecution and punishment. For example, the police can serve summons at the scene of the offence. Hearings for indictable road traffic offences are usually heard by a single judge instead of three judges. Most category five cases in the police court are handled with a simplified procedure- the public prosecutor sends the file to the judge, the judge decides on a sentence, the public prosecutor sends the judgement and fine notice to the driver by post.

De-merit point system became a law in 1989. However, the point system was actually introduced in July 1992. Initially, drivers started with 6 points but this was increased to 12 points, with lost points being regained if no further offence is committed for 3 years.

- loss of six points for indictable road traffic offences (which include drink driving)
- the number of points lost for speeding depends on the amount by which the driver exceeds the speed limit (4 points: +40km/h ; 3 points: + 30km/h and less than 40 km/h; 2 points: +20 km/h and less than 30km/h ; 1 point: less than 20 km/h).

The loss of points is in addition to fines and other penalties. Loss of all points leads to withdrawal of the driving licence and a 6-month prohibition from re-applying for a licence.

Drivers can regain a proportion of the points that they have lost by attending courses, which last for at least 16 hours and take place over at least two days. The main venue for regaining the total of points is to wait for 3 years without any further offence, rather than to attend specific courses. The Ministry of the Interior keeps driving licence records and central records on losing points. In 1997:

- About 87 000 drivers lose points every month.



- 1,046764 drivers have lost 2, 876 246 points
- 10,387 drivers have lost the total of points (5 213 in 1995 and 8 443 in 1996)
- 635 532 drivers have regained the total of points
- 81% are male (while they only do 63% of driven kilometres) and 20% are up to 20 years.
- 43% of points were lost for excess of speed ; 24% seat-belt + helmet ; 7% for BAC over 0.8g/l (indictable offence, 6 points) and 2% for BAC between 0.5 and 0.8 (minor offence, 3 points) ;
- The breakdown of lost points
  - 1 point : 29,3%
  - 2 points : 18,3%
  - 3 points : 22,1%
  - 4points : 22%
  - 6 points : 7%
  - 8 points : 1,3%
- The most common reason for getting a citation are as follows:
  - 1 - parking in urban areas, (parking fines are a source of income for the Town Hall treasury)
  - 2 - speeding, 1 129 254 tickets in 1997 (Gendarmerie: 767 152 ; Police: 232 361 ; CRS: 129 741)
  - 3 - seat-belts, 597 104 tickets in 1997 (Gendarmerie: 446 183 ; Police:117 030 ; CRS: 33 891)
- From a survey in one Département: speed = 23%, seatbelt = 22% ,papers (licence, insurance) =21% of all traffic offences (excluding parking)
- Summonses for illegal BAC, 95 495 sentences.

## Germany

Most traffic violations are under civil law. Criminal law applies when a special danger could be established. For instance in the case of 'Nötigung' (to force somebody else to engage in dangerous traffic behaviour). There are no special traffic courts nor special traffic judges in Germany.

For violations carrying a fine of up to 80 DM payment on the spot can be made. For more sever fines, or if driver does not want to pay on the spot (provided not a foreigner) a ticket is sent in the mail. Photo-radar tickets are sent by mail in the same way. Drivers can pay the fine in a bank or request an appeal. Every violation has a fixed fine and an associated number of points. The point system is described below. Fines for speeding range from 20 DM to 450 DM, and depend on level of speeding and if it occurred in built-up or non built-up area. Up to 20 Km over the speed limit carries no points. Fines for distance violation and DWI also linked to severity.

Severity and repeated offences (and accumulated points) can result in suspension, mandatory medical- psychological tests, driving tests, and mandatory remedial courses, counselling or rehabilitation programs (mainly for DWI).

There is a de-merit point system in use in Germany. An agency under the ministry of Transport is running the de-merit point system. All traffic fines over 80 DM and all



violations where a driving ban has been imposed are entered in the register. Small traffic fines (less than 80 DM) or official traffic warnings are not entered in the Flensburg register

Every traffic violation entered in the Flensburg Traffic Central Register (Verkehrszentralregister) will get one to seven points. After two years the points 'earned' with 'traffic fines' (Bussgeldentscheidungen) are cancelled. The points earned under penal law (Verkehrsstrafsachen) are only cancelled after five years. Points earned under penal law cases in which the penalty was at least 3 months imprisonment (Freiheitsstrafe) are only cancelled after 10 years.

If within the two year period needed for cancellation a new fine-violation occurs, the period of cancellation starts anew from beginning of the latest violation.

If a driver accumulates 9 point, she will receive an official warning advising her to correct her driving ways. In some cases persons will be forced to take a remedial course. If 14 points are reached it will be checked if person involved still is knowledgeable about traffic rules by a theoretical test. If there is additionally the suspicion that the involved person does not have the abilities to control his vehicle, a road test is required. If a driver accumulates 18 points within a two year period the driving license is revoked and a medical-psychological investigation is required. (source: <http://home.t-online.de/home/071583668-5792/flensbg.htm>)

#### Points for speed over limit (cars)

Violations	built up area	Outside
21-25	1	1
26-30	3	3
31-40	3	3
41-50	4	3
>50	4	4
>60	4	4

### **Italy**

Traffic violations (when not related to accidents) are not part of the legal criminal code in Italy. Neither there are no special traffic courts or special judges for traffic violation cases in Italy as is the case with in most European countries. Moreover, there is no demerit point system applied in the country. For the majority of violations the law defines different fixed fines. For other, serious violations the law allows suspension of the driving license. For more serious violations the law allows prison terms as well. The whole range of sanctions as mentioned above are applied to all violations depending on the severity of a violation including drink driving.

### **The Netherlands**

In the Netherlands most of the minor and also some more serious traffic offences are now under administrative law. The Mulder-act in the early 90s made major changes in



traffic law. There are no special courts and no specialised judges for traffic in the Netherlands. The sanctions under criminal law are less than 3% of the total number of traffic sanctions. Procedure for administrative Mulder-cases, (most violations): One can write a letter of appeal to the Officer of Justice; often a co-worker of the Officer makes a decision as to the legitimacy of the appeal; the person accused can make a further appeal against this decision at the kantonrechter. The Officer of Justice then invites the person for a meeting at the kantonrechter where his appeal will be treated. Secretaries, co-workers and administrative personnel prepare almost all Mulder cases and (simple) violations. Procedure traffic violations outside Mulder-sphere: The police file in a proces-verbaal; the Officer or a co-worker evaluates the case and 1. offers a transaction or 2. brings the case to court. All officers, irrespective of field of specialisation, have court duty (kanton-zitting) by some pre-determined roster. There is no de-merit point system in use the Netherlands currently.

Reliable statistical information is only available for administrative sanctions, so called Mulder-transactions (also called OM-transactions) which form the bulk of traffic sanctions in the Netherlands (>95%). Mulder-cases which are doubtful can be cancelled (vernietigd); other traffic violations which are doubtful may be geseponeerd. In general, this pre-selection ensures that most of cases treated in court will lead to conviction. The OM strives that no more than 10% of the cases will be geseponeerd. (closed?)

In 1994 (laten we CJIB 1998 even raadplegen want dit is wel erg obvious), 2.527.961 administrative sanctions were meted out for traffic violations. 107.100 times an appeal was made with the Officer of Justice; this is 4,2% of the number of sanctions.

In case of sanctions based on registration of license plate in 4,6% of the cases an appeal was made. In case of sanctions based on stopping the offender, in 2,7% of the cases an appeal was made.

Percentage of appeals for different offences in 1994 was:

Speeding appeal 3,0%; Faulty parking appeal 4,9%; Red light negation appeal 5,6%; Other appeal 5,2%. In 1993 27,7% of the sanctions appealed were abolished, 10,2% were modified;

## Norway

Norway has its own Road Traffic Act with several adherent regulations defining traffic rules and traffic violations. Violations of the Road Traffic Act are defined as “misdemeanours” or as a “crime”. This distinction is dependent on the severity of the violation. There are no special traffic courts or traffic judges in Norway. As in Finland and in the Netherlands, there is no demerit point system in use in Norway. Definitions: A ticket is the sanction you get for parking offences, for not using a safety belt, child restraint systems or helmets (if you are a motor cyclist). These sanctions are not regarded as criminal acts, and you are not registered in some centralised register of convicted persons.



A ticket fine – or “simplified fine” ( translated from Norwegian) – is the sanction you get as a driver on the scene of some police control on the road/at the roadside, for example in a speed control. Ticket fines are applied in cases of (traffic) offences/misdemeanours.

In cases of more serious violations, or if the driver do not accept the ticket fine, the driver is notified, the event is investigated by the police, he/she must make a statement before the investigator. The driver is fined if he/she is found guilty. If the driver does not accept the fine, the case is brought before the court.

The type of sanctions that the police apply, is dependent on the type of violation and also on the violation severity. The reaction in the case of a speeding violation, could be an oral warning, a ticket fine or a revocation of the licence. The reaction is dependent on the number of km/h above the speed limit. The Table presents the distribution of reaction types used by the police in 1997.

Distribution of reaction types. Police enforcement activity 1997. Norway.

<b>Type of reaction</b>	<b>N</b>	<b>%</b>
<u>Ticket fines</u>	<u>122.463</u>	<u>29,5</u>
<u>Notifications (serious violations)</u>	<u>37.995</u>	<u>9,2</u>
<u>Oral warnings/injunctions</u>	<u>195.100</u>	<u>47,1</u>
<u>Tickets for not using seat belts</u>		
<u>/helmets/child res. systems</u>	<u>32.697</u>	<u>7,9</u>
<u>parking violations</u>	<u>7.857</u>	<u>1,9</u>
<u>Number plates removals</u>	<u>6.344</u>	<u>1,5</u>
<u>Licence revocations – speeding</u>	<u>5.892</u>	<u>1,4</u>
<u>Licence revocations – drink driving</u>	<u>4.166</u>	<u>1,0</u>
<u>Licence revocations – other</u>	<u>1.913</u>	<u>0,5</u>
<u>Total</u>	<u>414.427</u>	<u>100,0</u>

The following lists the type of sanctions applied in Norway.

- Tickets: Parking offences and for not using seat belts/child restraint/systems/helmets (fixed amount) Ticket fines. ( Directly translated from Norwegian: ”Simplified fine”):
- Speeding: fixed amounts dependent on speed limit and number of km/h above the speed limit.
- Red light violations: Fixed amount.
- Road sign violations: Fixed amount.
- Violations of road markings: Fixed amount.
- Overtaking violations, yield sign violations: Fixed amount.
- Drunken driving: Fines combined with suspended sentence or unconditional imprisonment (dependent on BAC-level), plus fine. The amount is dependent on level of monthly income. Revocation of driving licence.
- Penalty points: Not used
- Licence suspensions: In cases of speeding at speeds above certain, fixed levels – (dependent on the speed limit violated). Suspensions may also take place in cases of



“dangerous driving”. Driving licence is routinely revoked in cases of drunken driving above limit (BAC-level of 50 milligrams alcohol per 100 millilitres of blood, or equivalently: Alcohol concentration above 0,25 milligrams per litre of breathed/expired air).

- Imprisonment – suspended sentence or unconditional – dependent on severity of violation: Drunken driving (as above), severe speeding, “dangerous driving”, especially in cases of accidents with severe consequences.

## Spain

In Spain there is a special Traffic Code, not part of the criminal code, except for criminal negligence. The code covers legal rules on traffic, driving of motor vehicles, enforcement and control and road safety. There are no special traffic courts and no special judges for traffic violations either. Moreover, there is no a point system in use in Spain. Recently, there has been taken in use special quick procedures for drunk driving.

Consequences of traffic violations are: fines, license suspension, and others, depending on the severity of the violation: Slight violations result in fines, whereas serious violations are followed by fines and a possible suspension, up to three months. Most violations have fixed fines for each type of violation. Drink driving is mainly treated similarly to other violations. Some offences come under the penal law. For example: driving under the influence of drugs, not aiding those injured in accidents, driving a car without any insurance. The common reasons for getting a citation are: speed, alcohol and parking.

## United Kingdom

Traffic violations are part of the criminal legal code with the exception of parking and vehicle emission violations. However, there is a discussion going on about decriminalisation of traffic violations. In 1991 the Government formulated an Act of Parliament to encompass all aspects of unattended enforcement. The 1991 Road Traffic Act introduced a new category of fixed penalties in England known as the Conditional Offer Fixed Penalty (COFP). Conditional offers of a fixed penalty can be sent by post at police discretion to violators caught on camera. Generally there are no traffic courts in UK. Sometimes for the sake of convenience traffic cases are assigned to one court.

Offences can be dealt with by penalty charge notices, fixed penalty notices, court proceedings (Magistrates' court), written warnings or vehicle defect rectification scheme (VDRS). Demerit points, referral to medical boards. Examples from penalty points are as follows:

Penalty for speeding:

1. up to 15MPH over the posted limit:- fine, £ 44.00 plus £ 30 costs, 3 penalty points
2. 16 to 25 MPH over the posted limit:-fine, £ 45.00 to £ 100 + £ 30 costs, 4 points
3. 26-35 MPH over the posted limit:- fine £ 45.00 to £ 200 + £ 30 costs 5 or 6 points
4. 36 + MPH over the posted limit:- fine £ 67.00 to £ 300 + £ 30 costs, disqualification min 1 month, maximum 12 months.



With speed cameras there are fixed penalties (40 POUND + 3 points) for 'normal' speeding offences. In general, driving 100 miles per hour on 70 mph motorway goes to court. The most common reasons for getting a ticket in UK are listed below:

1. Obstruction, waiting and parking (5,8 million in 1996: 100% fixed penalty/penalty charge)
2. Speed limit offences (0,76 million in 1996, of which 78% fixed penalty/penalty charge)
3. Neglect of traffic signs and directions and pedestrian rights (0,28 million of which 75% fixed penalty/penalty charge)
4. Miscellaneous (0,25 million of which 64% fixed penalty/penalty charge)

(Source: Home Office Statistical Bulletin, Motoring Offences England and Wales 1996)



## Appendix B

**Table B1. Point system & licence suspension in Europe in 1998 (Source: Sartre-2)** (Note that the situation has already changed in some countries e.g. Germany where regulations changed per 1 May 2000.)

Country	Point system present?	Possibility of licence suspension (+50 = violation of limit with more than 50 km/hrs)			
		Violations on motorways, highways or main roads	Violations on secondary roads	Violations on roads with traffic calming	Violations in built-up areas
Austria	No	+50 at least 2 weeks suspension	+50 at least 2 weeks suspension	+40 at least 2 weeks suspension	+50 at least 2 weeks suspension
Belgium	No	+50 2 weeks suspension	+ 50 2 weeks suspension	+50 2 weeks suspension	+50 2 weeks suspension
Finland	No	+40 flexible	+40 no info	+40	+40
France	Since July =92	+30/+20 suspension	+20 suspension	+20 suspension	+20 suspension
Germany	Before>91	+40 no info	+40 suspension outside urban	+30	+30
Greece	Before>91	+40 suspension	+40 suspension	+40 suspension	+40 suspension
Ireland	No	No info	no info	no info	no info
Italy	Before>91	+40suspension	+40 suspension	+40 suspension	+40 suspension
Nethlds	No	+50/70suspension possible	+50 suspension possible	+50 suspension possible	+50 suspension possible
Portugal	No	+30/50suspension possible	+30/50suspension possible	+30/50suspension possible	+30/50suspension possible
Spain	No	+50/77suspension	+49/69suspension	+28/39suspension	+29/40suspension
Sweden	No	+31 usually suspension	+31 usually suspension	+21 usuallysuspension	+31usually suspension
UK	Before>91	No info	no info	no info	no info
CzechR.	No	+30 no info	+30	+30	+30
Hungary	No	+40/+33/26 suspension	+26 suspension	+10 suspension	+17 suspension
Poland	Since June 93	No withdrawal	no suspension	no suspension	no suspension
Slovakia	No	+30 no info	+30	+30	+30
Slovenia	No	+60/+50 no info	+40/45	+15/20	+30/35
Switzerld	No	+30 no info	+30	+30	+30