A Public Policy in Evolution: Speed Enforcement in France (2000-2010)

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Abstract

This contribution proposes to investigate the nature of the changes which occurred during the last decade with regard to speed enforcement in France. New legislations, political commitment and the implementation of an ASEP represent the main evolutions. The article details the modalities of this change in speed enforcement activities: modification of organisation of speed enforcement, evolution of speed offences and the implications for manual speed checks. It analyses also the consequences concerned with these changes: evolution of driving speeds and speeding behaviour.

Introduction

Over the last ten years the road safety situation has undergone a remarkable change in France, with the number of deaths down by over 40% between 2000 and 2010. The injury rate has shown a similar decline. At the press conference organised by the CISR (National Interdepartmental Road Safety Committee), it was announced that the road safety policy permitted to save 23,000 lives since 2002. And 13,500 fatalities would be avoided because of the change of speeding behaviours.

The introduction of an automated speed enforcement programme (ASEP) has doubtless played a considerable part in reducing road hazards in France, but other measures – the campaigns against driving under the influence of alcohol and drugs, together with educational and training strategies – must also be taken into account. However, the coercive aspect of public road safety policy has been particularly stressed by the authorities in recent years.

This paper offers a study of speeding deterrence policy for the period 2000–2010 by adopting the case study approach (Yin 2009). Its aim is to achieve a degree of analytical objectivity and to situate recent changes in a broader time frame. The first section argues for the idea that this decade is characterised by a coercive activism that has found expression in the development of new tools and the framing of new laws, with energetic backing from politicians. The flagship measure here remains the automated speed enforcement programme. The second section highlights the consequences of this public-sector policy on violation behaviours. Modes of checking and sanctioning have changed, with automation now playing a major role. The rise in the use of automatic devices has in turn brought a steep rise in the number of infractions recorded, but manual checking remains a significant means of enforcing speed limitations.

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detection. The third and final section takes a detailed look at speeding behaviour and speed limit violations: here the salient points are lower traffic speeds and greater compliance with speed limits.

1 Organisational and political changes

1.1. Towards a new coercive activism: the evolution of the legal and operational framework

In France, the period 2000–11 has been characterised by a marked coercive activism related to speed enforcement, with the authorities radically modifying the legal framework so as to allow the penalising of new behaviours and more stringent sanctioning of infractions. This has involved changing the operational framework by providing the police with special new equipment. Implementation of this policy was facilitated by at least two factors. Firstly, the impunity enjoyed by offenders and those responsible for road accidents became less and less tolerable for the general public. Secondly, reinforcement of road safety measures benefited from the favourable context created by the rise of safety issues generally (Mucchielli 2008).

Changes to the operational framework consisted in reinforcing traffic controls via repetition, but also in creating new planning tools for checks. Thus a circular of 20 January 20003 outlined the planning of traffic controls in France’s départements, with specific emphasis on achieving consistency at local level by bringing together the various representatives of the forces of law and order and optimising the means of enforcement in the light of the aims being pursued. This involved providing the police with equipment that was new, more sophisticated and better suited to the task in hand. It was planned, for example, that from 2001, the police should receive fifty new radar speed trap devices per month,4 these being more readily usable than the traditional ones housed in ageing cars. The authorities' aim was a 10% increase in checks made possible by a 25% increase in finance in the context of a three-year scheme (ONISR 2000, p. 14). It was also an ongoing policy during the last years. Furthermore, the Péllissier Report offered legal solutions, notably that of "owner onus" – responsibility of the vehicle's owner for speed limit violations – and the extension of flat rate fines to all such violations (Péllissier 2002).

Another major change came in the form of modifications to the legal framework aimed at penalising new behaviours and imposing heavier penalties. This is not the place for an exhaustive detailing of the different measures, but it is worth noting that a 1998 decree established a "5th category" infraction covering speed limit excesses of 50 kph and more; that the road safety legislation of 18 June 1999 included, among other things, the notion of second or repeated offences for marked violations of the speed limit and the financial responsibility of the owner in cases where the driver could not be identified; and that Law no. 2001–1062 of 15 November 2001 established mandatory, immediate withdrawal of a driver's licence for speed limit excesses of 40 kph and more. In addition, the permis blanc ("discretionary licence") was abolished.5 In the course of 2003 various decrees upped the sanctions for failure to wear a seat belt or safety helmet and for driving with a blood-alcohol level of 0.5–0.8 grams. The law of 12 June 2003 offers a clear illustration of the new coercive activism in its extension of penalties (five new offences created) and definition of new violations such as

3 Circular of 20 January 2000 relating to the implementation of traffic checks in France’s départements, Journal officiel de la République française, 1 February 2000, pp. 1657–58.
5 A licence allowing an offender to drive for strictly professional purposes.
telephone use at the wheel and driving under the influence of drugs. The decree of 6 December 2004 increased the penalty for speed limit excesses of 50 kph and more, while lowering the fine for violations of 20 kph and less. In the same year the maximum blood-alcohol level was reduced to 0.2 grams. The mounting attack on speed violations was continued in 2006, with still higher penalties for infractions of 50 kph and more, plus on-the-spot confiscation of the vehicle. More recently the last interdepartmental Road Safety Committee (CISR) decided to increase the amount of the fine (3750 €) and the number of demerit points (6 points) for high speed excess (>50 kph) and to augment the number of demerit points for drink driving.

1.2. Commitment by politicians: varying degrees of success

In addition to a coercive activism marked by laws providing for severe speeding sanctions, the Jospin government's minister of transport Jean-Claude Gayssot left his stamp on road safety policy via a number of major decisions. Firstly, road safety was made a major national cause in the course of 2000, mobilising actors from different camps and triggering media interest that would generate a new public awareness regarding the issues involved in road accidents (ONISR 2001, p. 22). In the same year the authorities decided to create a National Council for Road Safety (CNSR), whose mandate was to make submissions to the government and to commission studies and assessments relating to road safety policy. However this council did not perform very well during the last years and it was decided with the last CISR to give a new start to the council. Nonetheless, the road toll remained on the whole stable for the years 1997–2001, especially in terms of deaths: thus the assertive policy of the period seemed not to have achieved any notable results. Indeed, transport minister Gayssot's declaration that the number of road deaths would be reduced by 50% in 1997–2001 sounded more like an avowal both of the failure of the policy of the time and of the government's inability to induce citizens to change their driving behaviour. 2001, in fact, saw the road safety situation deteriorate.

However, an initial shift was brought about in the course of 2001 in the context of debate about the effects of the presidential amnesty on the road toll. The various presidential candidates were prevailed upon to make their stances and projects clear (Dumay and Saux 2001). Independently of the scientific uncertainties surrounding this kind of effect, the most significant outcome of the debate was to turn road safety into a political issue, and one that president Jacques Chirac would later make skilful use of. A further result was the law of 2002 which set strict limits to road safety violations open to presidential amnesty. In his presidential address of 14 July 2002, Jacques Chirac announced that road safety would be a priority for his term of office. He called for action signalling "a clean break" with past practice, denounced the "national road safety scandal" and referred to the "barbarous behaviour of some drivers" (Hivert 2002). This top-level commitment by the state would facilitate the gradual introduction of the automated speed enforcement system. Under Prime Minister Jean-Pierre Raffarin the government endorsed the head of state's choices regarding the "war on road hazards", which were described as a "national scourge". The president's engagement with the issue would also facilitate the passing of successive laws instituting, among other things, harsher penalties. The police now felt they had political support in their grassroots combat against the road toll and so showed increased motivation in carrying out their tasks (Carnis 2008a, p. 227). Generous provision of sophisticated equipment – fast cars,

\footnote{Cf. note 1.}

\footnote{20th of may 2011.}
automatic and laser speed detection devices – confirmed presidential and governmental determination to change road safety policy (Carnis 2008b).

The increasing number of installed speed cameras fosters opposition from members of parliament who contest the demerit points system and the severity of punishment (Doucet 2010; Nunés 2011). Associations of road users and motorcycle users, but also the makers of electronic devices announcing the locations of speed cameras joined in a common protest against the programme. The road accident victim advocacy group severely criticized the fickle position of government. However it seems that government keep defending a strong position by refusing to relax its road safety efforts and by announcing more speed cameras and a higher severity for speed offender (Seux 2011; Négroni 2011a, 2011b). Moreover, government decided that fixed speed cameras will no more signalled, but conceded that speed indicator devices will be installed at a random distance from the seed camera. The next months will prove decisive for the government and its ability to manage the political pressure from the MPs and social acceptability from road users.

1.3 The flagship measure: Introduction of automated speed enforcement

Automated speed enforcement is without question the major, emblematic event of this decade of change in road safety policy in France. Sophisticated checking technology has been introduced and the road toll has shown considerable improvement, with the annual number of deaths down by almost 40% since 2002.

In 1999 the Interdepartmental Road Safety Committee (CISR) set out to enhance the effectiveness of speed checks by providing the police with more sophisticated equipment and resorting to automation of checks (ONISR 2001, p. 23). In this respect it was making use of an earlier suggestion which the authorities had until then not put into practice (Commission de la sécurité routière 1989, p. 33; Namias 1994, p. 23).8

In December 2002 the CISR decided to install an automated speed enforcement system. Tests began early in 2003, with the first devices being officially put into use by the minister of transport and the minister of the interior9 in November 2003. Installation of the devices then went ahead at the rate of some 500 per year. In January 2009 the CISR decided to continue at this pace until 2012: by then France will have 4500 such devices, some of which will be used for red-light checks. At present, more than 2600 speed cameras are operated throughout the French road network (Carnis 2011, p.16). Automated enforcement is seen as an essential program for contributing to the reduction of road fatalities in line with the official goal of a reduction to 3000 deaths annually by 2012.

The automation of speed camera programme makes possible that an offender can be detected by an automatic radar device, then pay his fine, without the least contact with a representative of the state. The resultant dematerialisation of the legal proceedings reduces the possibility not only of various "parasitic" practices – latitude, leniency, abandoning of cases under the statute of limitations – but also of variations in penalties (Pérez-Diaz 1998, Barberger 1992). This detection/sanction method represents a marked change from previous

8 These reports argued for automation of speed checks, whereas the system now in use involves automation of both checks and penalties.
9 Nicolas Sarkozy, who would be elected President of France in May 2007.
practice in that it involves integration of the checking and punitive tasks, together with the technical capacity to deal with the mass of offences constituted by speeding violations. Thus, between 2003 and 2009, over 36 million infractions were processed via the system.

2 The deterrence policy: a "revolution" on the march

2.1. Reorganisation of traffic violation checks

The implementation of an automated speed enforcement system represents a major institutional innovation, and one which has brought substantial change to the way speed limit enforcement was previously organised (Carnis 2010). In 1998 18.8 million violations of the traffic code were detected, with the figure rising to 20.8 million in 2009: a rise of some 10.6% in relation to 1998. In 2009 automatically processed violations accounted for approximately 41% of the total. Furthermore, over 47% of the violations identified have to do with speeding, whereas this category was barely 8% of the total in 1998. This rise in the proportion of speeding violations illustrates the efficiency of automated devices in mass detection of certain behaviours. In the years to come automation of red-light enforcement and even of illegal parking detection is going to increase the proportion of automatically detected offences, and automated processing will thus become the norm.

There have also been notable changes in the institutional organisation of speed limit enforcement. The automatic speed enforcement system is a form of organisation additional to that of the two major policing bodies: the Gendarmerie, which covers rural and periurban areas (95% of French territory), and the police forces working in the cities. Each has a traffic policing function within its specific jurisdiction, while the automated system covers the entire national territory and knows no jurisdictional limits as such. The speed camera program rests upon a specific organisation with the automated speed enforcement department (DCA), responsible for the strategic decisions and the Interdepartmental Automatic Speed Enforcement Project (DPICA) which operates the system (Carnis 2011). Thus the organisational system of speed enforcement is a three-tier one.

Another three-part structure has taken shape in respect of deterrence. Manual checks are always undertaken by members of the police or the Gendarmerie, with the latter body estimating traffic work as representing around 20% of its overall activity. With regard to automated enforcement, part is carried out using fixed apparatuses and the rest with mobile equipment whose operation is in the hands of the Gendarmerie and the police.

2.2. The evolution of enforcement: an increasingly greater role

The number of identified speeding offences increased nine-fold between 1998 and 2010, a change basically due to the substantial contribution of the automated enforcement system, which accounts for over 85% of the total. The number of infractions recorded by the police has not suffered greatly from the introduction of automation, with a total of some 1.3 million for 2009 – a slight downturn from 2004–05, when the figure was 1.8 million. This

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10 The handwritten speeding ticket is no longer used.
11 These are speeding violations only.
change may be explicable in terms of the increasing use of mobile devices since 2006: more manpower has been allotted to this task, the result being a decrease in "manual" enforcement activity. The fall in the number of speeding offences can also explain in part the observed fall in the overall number of traffic violations.

The number of offences registered by the automated system has risen each year since its implementation. In 2010, 10.2 million of speed tickets were notified and 9.7 million in 2009. However this rise does not mean that the system fails to deter excess speeds; rather it is explained by the ongoing installation of new devices. The average number of violations detected by each device actually decreases every year, with a drop of 46% between 2005 and 2008. This change should be compared with the traffic work of the police, who have received no additional financing for their manual road safety tasks.

Also highly revelatory is an examination of the changes in non-ASE speed limit violations in terms of their seriousness. Violations of 30 kph and more peaked in 1998 at 48% of the total. By 2009 they accounted for no more than some 16% of all manually detected infractions. Their number began to decrease in 2002, when violations of 20–30 kph became the most numerous, with their culmination coming in 2004, when they were 40% of the total. Violations of less than 20 kph rose rapidly over this period, reaching a ceiling of over 500,000 in 2005. Their number then declined. Whereas they represented 6% of all infractions in 1998, they were running at 30% in 2009. Since 2004 minor speed violations (<20 kph) have outstripped major ones (>30 kph). These respective changes highlight the deterrent effect produced by the new enforcement policy, with violations tending more and more towards the less serious categories. This view is confirmed by the DPICA statistics on the distribution of speeding violations according to their level of seriousness. For the period 2003–2008 more than 90% of violations detected by automated devices were of less than 20 kph, with the highest excess speeds representing barely 3% of the total.

The new deterrence policy put into effect over the last ten years has worked relatively well: extreme excess speeds have virtually disappeared. At the same time the sheer number of minor speeding offences also points up the end of the impunity that once prevailed. Other changes too deserve mention, among them the hike in the number of suspended driving licences caused by penalisation of excess speeds: 12 In 1998 the total was 3,830, but by 2002 it had risen more than fourteen-fold to 55,950. By 2008, however, it was down to 29,555, a fall of over 50% that once again illustrated the deterrent effect of the change in policy. Between 1998 and 2009 the number of driving licence points lost more than trebled, with the number of drivers having lost all their points reaching 92,123 in 2009 – eight times more than in 1998 (98,057 in 2008). Thus the coercive activism of this last decade has resulted in the removal from the roads of a steadily increasing number of drivers considered as dangerous. This situation raises many issues for the authorities, who have to justify the retention of a highly coercive policy at a time when excess speed violations have very largely fallen into the lower categories.

12 This was an administrative penalty.
2.3 Issues associated with continuance of traditional checks

The automation of speed checks did not lead to a reduction in the resources available for police road safety work. The relative stability of the violations detected manually suggests a possible association between the different techniques for producing deterrence. For example, one-third of all violations in excess of 30 kph are detected by the police. It should be noted that police work in this field is marked by an assessment margin that takes account of the circumstances under which the offence was committed. A police officer can apply powers of discernment not possessed by the automated device, which is perceived as "blind". More than 90% of ASE-registered violations involve minor excesses, while almost 70% of those detected manually are over 20 kph. Thus two deterrence rationales are at work, but they are complementary. Automation enables mass processing of violations, leaving the police free to concentrate on the most dangerous behaviours and fine-tune the overall deterrence strategy. The manned control permits to allocate the enforcement resources toward high speed offenders and foreign drivers. One consequence of the ASE is the setting up of a new division of labour in terms of speed behaviour deterrence, by establishing complementarity between automated and manned speed checks.

3 Evolution of speeding behaviours

3.1 The overall evolution of speeding: the big shift of 2002

The increase in enforcement facilities generated a rise in the number of speed limit violations detected. However, closer analysis of these violations in terms of their seriousness has also brought to light the existence of behavioural adaptations. The change of behaviour in respect of speed choices can be evaluated via, among other things, an examination of the overall speed indicator, a weighted index taking account of the speeds of different vehicles on the country's different road networks (Figure 1). This indicator has fallen by 10 kph since its first use in 2002 – a drop of 12%. Prior research has demonstrated the close correlation between changes in traffic speeds and speed limit enforcement both automated and manual. 80% of the gains in terms of speed reduction, as illustrated by the changes to this indicator, were achieved between 2002 and 2005, while those obtained since then are steadily less. Thus a speed enforcement system presents a diminishing marginal return in terms of effectiveness (Carnis 2008b), a datum that must be taken into account by the authorities in respect of the future emphasis they envisage for the speeding deterrence system.
The favourable changes with regard to speeding since 2002 mark a break with the first half of the decade under study. Since 1996 speed behaviours in France had been deteriorating on most road networks and among the different types of road users (ONISR 2001, pp. 82 and ff). Thus between 1996 and 2001 the average speed for passenger cars during the day had risen by 7 kph on freeways and 2 kph on main highways. In the urban context it remained stable, but the overall trend was upwards. It would seem that this public policy had failed to lead to effective implementation of public anti-speeding policy (Chapelon 2008, p. 32).

The number of hours devoted to speed checks by the police diminished by 27% between 1999 and 2001. Thus 2002 stands out as marking a clear break not only in terms of driver behaviour, but also in respect of a public policy which then became credible and effective.

3.2. Excessive speed

The decrease in traffic speeds is a major feature of the period that began in 2002, and one that went hand in hand with another notable change: the fall in the number of extreme speed limit violations. While in the first four months of 2002 violations of 30 kph represented 7% of cases, the figure fell to 0.57% for the last four months of 2010. This virtual disappearance of extreme excess speeds signals a change in the behaviour of road users, who have been deterred from going too far over the limit.

Analysis of the level of excess speed for the different categories of vehicles points to a general trend towards increased observance of the rules governing driving speeds since 2002. The proportion of cars driven at more than 10 kph over the speed limit fell from 37% early in 2002 to around 12% in early 2009 – a spectacular reduction of some 68%. A similar change was observed in the case of trucks: 65% over the same period. Even motorcycles showed a reduction of 46%, despite a disregard for speed limits significantly higher than among other road users. The actual figure was some 2.5 times that of cars and trucks, so the change of behaviour was less significant within this group. A partial explanation lies in the impossibility of identifying motorcycles: their licence plate being at the rear, they elude some automated
devices, which take photos frontally. A more disquieting change, too, is an increase here of some 20% since the end of 2006.

Different effects are also observable when the analysis is concerned with the evolution of speed excesses in terms of the type of road network. However, the continuing overall trend is towards a significant drop in excess speed levels for all networks. The decrease is more than 80% for main and secondary roads, while it is less marked in the case of freeways: 70% for the period 2002–early 2010. The excess speed level remains significantly higher on freeways than on the rest of the road network: twice that of main roads and four times that of secondary roads. This figure can be better appreciated in the light of the fact that 80% of fixed radar speed traps are on main and secondary roads, and only some 16% on the freeway network. The geographical strategy behind the deployment of automated devices has doubtless influenced the results obtained.

The evolution of traffic speeds signals a change in driver behaviour which took place in the course of 2002. The disappearance of major speed excesses and the fall in the number of infringements for all networks and all users reflect the operational use of new tools as part of the policy of coercion and the real effectiveness of the policy of deterrence.

Conclusion

The overall road safety situation has shown considerable improvement over the last years. These encouraging results can be partly explained by the implementation of a new policy of deterrence in respect of excess speed. New tools, heavier penalties, effective application of the law and the introduction of an automated speed enforcement system have changed driver behaviour in terms of speed choices and observance of the rules. Analysis of checking activity highlights the end of impunity for all speed limit violations, including those lowest on the scale.

This change of policy is clear evidence of a new approach to the handling of illegal behaviour. However, fresh questions have emerged regarding the political and social "sustainability" of this kind of public measure. Is coercion the only solution to the problems of behaviour on the roads? Will the authorities be able to pursue the intensification of their policy of deterrence given that future gains will inevitably show a decline? Will they come up with equally effective alternative policies regarding road safety? These are questions for which they will need to find answers rapidly.

The French case represents also an interesting experiment for the other countries. Indeed it emphasizes that there is no guarantee that a public policy will be a success before implementation. Although the political commitment, a well-designed policy, and legitimacy from the public are the necessary ingredients for a successful policy, they are far from the sufficient conditions for a good implementation (Carnis 2011).

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