

Traffic Law Enforcement across the EU

An Overview

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An Overview

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European Transport Safety Council

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The European Transport Safety Council

The European Transport Safety Council (ETSC) is an international non-governmental organisation which was formed in 1993 in response to the persistent and unacceptably high European road casualty toll and public concern about individual transport tragedies. Cutting across national and sectoral interests, ETSC provides an impartial source of advice on transport safety matters to the European Commission, the European Parliament and, where appropriate, to national governments and organisations concerned with safety throughout Europe.

ETSC brings together experts of international reputation and representatives of a wide range of national and international organisations with transport safety interests to exchange experience and knowledge and to identify and promote research-based contributions to transport safety.

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Executive Summary

This report is the result of ETSC´s "Traffic Law Enforcement Programme". It monitors enforcement practices in the EU in order to stimulate best practice exchange and identify further needs. It focuses on police enforcement in the field of speeding, drink driving and seat belt use and examines the implementation of the European Commission's Recommendation on traffic law enforcement (EC 2004). In this Recommendation EU countries were asked to apply in a national enforcement plan what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation. Traffic law enforcement measures in these three areas, in combination with awareness raising activities, are the most important instruments to reach the EU target of halving annual road deaths by 2010.

The first part of the report provides an impression of the main emerging trends across the EU including recommendations for EU decision makers on how to further progress. The second part covers enforcement practices and progress in each of the EU's 25 Member States including recommendations for improvement.

Speeding is the single most important cause of traffic death and injury across Europe. But available data show that legal limits are insufficiently enforced even in the best performing EU Member States such as the U.K and Sweden. The examples of **Finland, the UK, Austria, France, the Netherlands** and **Belgium** show that well-designed speed enforcement schemes help to bring down speeding on all parts of the network. Evaluations carried out in **France** and the **UK** have moreover shown that speed cameras can help to substantially reduce casualties from speeding and that these safety effects may already be felt at a point when the number of speeding offences is still increasing.

The second greatest cause of road deaths, often mixed with speeding, is **drink driving**. In the EU as a whole, around 2-3% of journeys are associated with an illegal Blood Alcohol Concentration (BAC), resulting in 30-40% of driver deaths. The highest levels of drink driving checks are found in **Finland, Estonia, Sweden, France, Slovenia, the Netherlands, Greece** and **Hungary**. In all these countries, police have been empowered to stop and breath test drivers at random, i.e. without the driver revealing any suspicious behaviour.

Best results are achieved in countries that run random alcohol screening tests in conjunction with evidential breath testing. In Finland**, France, Sweden** and **the Netherlands** this has helped to reduce road traffic casualties significantly. Good results have also been achieved in some Eastern European countries such as **Slovenia, Estonia** and **Hungary** where the fight against drink driving has been a priority but its effects have sometimes been offset by less successful action in other fields such as speeding.

One of the areas given lowest priority is the enforcement of **seat belt wearing**, despite the fact that seat belts have been proven to have an enormous life saving potential. The best way to enforce seat belt use is through intensive and highly visible specific seat belt actions. Few countries report to be undertaking such rigorous and frequent checks. These include **Slovenia** and the **Netherlands** but also the land of **North Rhine Westphalia (Germany).** Seat belt wearing is increasing in all EU countries, but not all countries dispose of basic compliance information that is needed to guide enforcement efforts. More effort must be put into raising seat belt wearing rates particularly in those countries where compliance is low or rates are unavailable.

The overview shows that many EU countries are improving their levels of enforcement of speed, alcohol and seat belt legislation. EU countries increasingly apply best practice methods as outlined in the EC Recommendation in the areas of speed and alcohol enforcement. More and more countries are introducing automated speed enforcement, random screening tests and evidential breath tests, but seat belt actions based on the recommended *blitz* approach are much less common.

ETSC has also evaluated the latest progress made by the 25 EU Member States reporting the areas of speeding, drink driving and seat belt use. Finland tops the score with its exemplary speeding and drink driving enforcement records. It is followed by **Sweden, the UK, the Netherlands** and **Germany** who are all champions in one of the three fields. **Austria, Belgium, Denmark, France, Luxembourg** and **Slovenia** are improving in all three fields. And ten countries have been identified as improving only in one of the three areas. These countries include **Cyprus, Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Poland, Slovakia** and **Spain**.

The EC Recommendation has undoubtedly helped to raise the profile of traffic law enforcement in the EU countries. It has stimulated discussion and best practice exchange. In some Member States such as **Germany**, it has also led to an improved co-operation between the different actors involved. Member States should therefore continue the implementation of the Recommendation. But to ensure that all Member States achieve high standards in enforcement, the European Commission should also prepare a Directive that includes minimal requirements in all areas covered by the Recommendation, including also the follow-up of offences and information linked to enforcement.

Introduction

Traffic law enforcement, in combination with awareness raising activities, is the single most important measure to reach the EU target of halving annual road deaths by 2010. In that timeframe, only measures that target driver behaviour can have a real impact while measures relating to vehicle technology and road infrastructure typically need a longer time to bear fruit.

The effective enforcement of road safety rules, if carried out according to best practice standards, can lead to a rapid and massive reduction in deaths and injuries in a very cost-effective way.

The European Commission therefore adopted a Recommendation in October 2004 (EC 2004) on how Member States should improve their traffic law enforcement policies. In this Recommendation EU countries were asked to apply in a national enforcement plan what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation.

Independently of the European Commission, ETSC is monitoring enforcement practices in the EU in order to stimulate best practice exchange and identify further needs. This report is the result of more than a year's intensive exchange with enforcement experts from the various EU countries, including representatives from police forces, ministries and road safety organisations. It brings together, for the first time, an overview of all 25 EU countries including recommendations for each country.

The European target can only be reached if traffic law is enforced more effectively.

This report focuses primarily on police enforcement in the field of speeding, drink driving and seat belt use. Additionally, there are sections examining the follow-up of offences, information campaigns linked to enforcement and cross-border enforcement. The first part provides an impression of the main emerging trends across the EU including recommendations for EU decision makers on how to further progress. The second part, which is available from ETSC's website, presents a picture of road traffic enforcement in each of the Member States with specific recommendations for improvement. Finally, additional data on road safety and enforcement from the EU 25 Member States can be found in the Annex.

1 The need for improved enforcement

1.1 THE EUROPEAN COMMISSION WANTS BETTER ENFORCEMENT

The European Union has set itself the target of a 50% reduction in road deaths by 2010. It was adopted in the White Paper on the Common Transport Policy (EC 2001) and the Third European Road Safety Action Programme (EC 2003) which provided the appropriate framework for road safety policy planning in Europe. The Programme identifies three areas of action: the behaviour of road users, vehicle safety and improvement of road infrastructure. It also specifically outlines a key proposal to ensure the proper enforcement of the most important safety rules. This resulted in a Recommendation on Enforcement in the field of road safety (EC 2004).

In this Recommendation Member States are asked to apply in a national enforcement plan what is known to be best practice in the enforcement of speed, alcohol and seat belt legislation. To control speeds, automated speed enforcement systems must be used, and offences must be followed up by procedures able to manage with a large number of violations. For drink driving, random breath testing with alcohol screening devices must be applied and evidential breath testing devices used. In the area of seat belt use, intensive enforcement actions of a specific duration must take place several times a year.

The European Commission recommends Member States to apply best practice in the enforcement of speed, alcohol and seat belt legislation.

By 2007 the Commission will evaluate whether or not enforcement policies have improved sufficiently across the Member States. The Recommendation clearly states that if this is not the case, the Commission reserves the right to propose more binding legislation, such as a Directive.

The measures proposed in the Recommendation are based on the results of different EC funded research projects[1]. The European Commission also had a cost-benefit analysis carried out on the basis of proposals similar to the Recommendation. It assessed that increased enforcement would result in a total annual reduction of 14,000 road deaths and 680,000 injuries in the EU, and in a net benefit of 37 billion Euro or 0.44% of GNP (ICF Consulting 2003).

Following on from the publication of its Recommendation to the Member States, the Commission set up an Expert Group on road safety enforcement. The group collected responsible police officers and ministry officials from all the Member States. Its first meeting took place in June 2004 in Brussels where it was decided to form three Working Groups to discuss in more detail the enforcement of speeding, drink driving and seat belt legislation. In addition, a specific group has been looking to simplify the reporting requirements in the annexes to the Recommendation.

In sum, there is clear recognition by the European Commission of the contribution that enforcement can make to saving lives. There exists an EU policy instrument in the form of an EC Recommendation, a timetable to monitor progress in the Member States and an Expert Group led by the European Commission to support this process.

1.2 ... AND ETSC SUPPORTS THIS

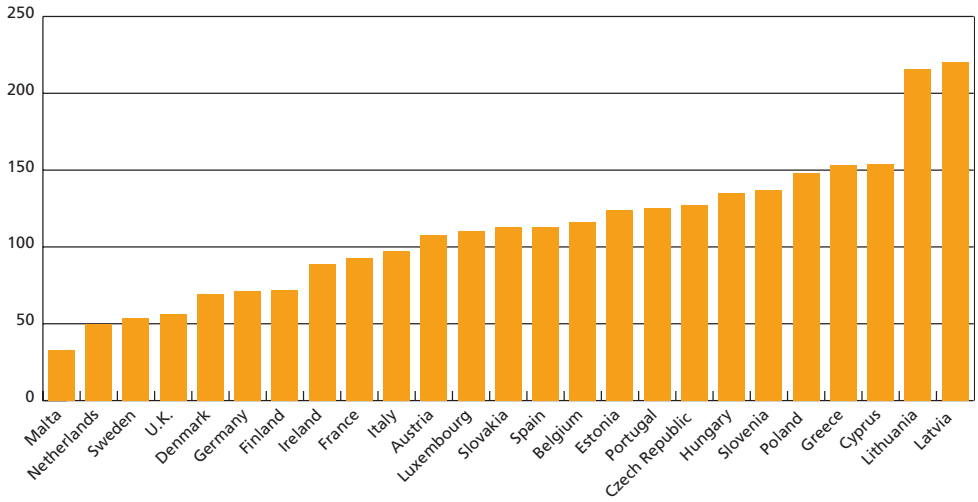
At the time of drafting of the EC Recommendation on enforcement ETSC, the Association of Chief Police Officers (ACPO) and the European Traffic Police Network (TISPOL) jointly called for binding legislation in the form of an EU Directive (ETSC et al, 2003). However, only a non-binding decision in form of a Recommendation was adopted.

[1] ESCAPE 2003, GADGET 2000, SUNflower 2002, VERA 2000, different ETSC studies and reports.

To establish whether or not EU countries are implementing this decision despite its non-binding nature, ETSC set up a programme in 2004 running over at least three years. The main aims of this programme are to identify and communicate progress made in the different countries and to share experiences on best practice in traffic law enforcement. As part of this programme ETSC has published several newsletters ('Enforcement Monitor') on topics such as cross-border enforcement, Intelligent Speed Adaptation and 'self-enforcing roads'. The first four newsletters also included some of the data that ETSC received from EU countries and that were used as a basis to rate their performance in enforcing road safety law.

This compendium brings together the findings of ETSC's research from 2004 to 2005. It focuses on the developments in 2004 with some attention to more recent changes in individual countries. The report aims to be a snapshot of progress made so far in EU Member States, anticipating the first official two-year report that the Commission will be able to compile no earlier than 2008.

Figure 1 Traffic fatalities per million inhabitants in EU countries 2004



2 Monitoring traffic law enforcement in the EU

2.1 THE FACT FINDING CHALLENGE

To evaluate current enforcement practices ETSC has been looking both at the extent to which existing laws are being enforced (input) and the extent to which these laws are complied with (output). As input indicators ETSC used, where available, the level of checks, level of offences and whether or not best practice methods are being applied. As output indicators ETSC used levels of compliance[2] and/or levels of deaths linked to non-compliance. On the basis of this information ETSC aimed to point out countries that successfully apply 'best practice' methods but also those countries that have been less successful ('worst practice'). However, the countries mentioned in both categories must be seen as examples only as a full analysis was only possible for those countries where ETSC obtained all the necessary information in the given area.

From our research it appeared that very few countries were able to supply data for all indicators. Often data were missing or could not easily be provided. The information was especially hard to get from some countries that have a federal structure and where responsibility for traffic law enforcement is with the regional level (e.g. Germany). It is however important that data are centrally collected and made these available as otherwise no proper monitoring of enforcement policies can be carried out. Our findings have once again confirmed this. Those countries that collect and provide data are generally the ones with the better road safety records while those countries that do not do so include the ones that have been less successful in preventing death and injury on their roads.

It is important that data are centrally collected and made available as otherwise no proper monitoring of enforcement policies can be carried out.

Switzerland, which is not an EU country, is a shining example of how traffic law enforcement should be monitored. This country has introduced a detailed indicator system to monitor developments in the areas of speeding and drink driving. Indicators include the levels of police checks, levels of offences as well as the severity of sanctions. Some indicators also relate to the feeling of drivers about the relevant safety rules and their enforcement. The data stem from a multitude of different registers and surveys and it are updated on a regular basis[3].

2.2 DO THE RULES NOT MATTER?

While the rules are essentially the same for the whole of the EU in the area of seat belt use, legal speed and alcohol limits vary from country to country[4]. Research suggests that the actual value of the limit is less important than the extent to which these limits are applied (SUNflower 2002, CNSR 2004). But our findings are not clear in that respect.

In the area of drink driving it can be shown that the proportion of deaths over the legal limit is roughly the same in all countries (Table 1). This means, however, that in countries with higher limits, the proportion of deaths linked to drink driving is higher than in those countries with lower limits. But each of these countries that have a higher BAC limit also has a relatively low level of checks so it is not quite clear which of the factors is more important.

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[2] Behavioural indicators such as observed levels of speeding, drink driving and seat belt use are not collected by all countries. See ETSC 2001, SafetyNet 2005

[3] The indicator system has been available since October 2005 in French and German under http://www.bfs.admin.ch/bfs/portal/fr/index/themen/rechtspflege/indic/ind11.html.

[4] There has been an EU wide legal obligation to use seat belts in all seats since 1991 (EU Directive 91/671/EEC). In 2006, a new Directive (Directive 2003/20/EC) will also mandate the use of appropriate child restraint systems for all children travelling in passenger cars and light vans.

Table 1 Legal BAC levels and their enforcement in some EU countries

Country	Legal BAC limit	Enforcement intensity	Proportion of deaths from accidents caused by drivers over the legal limit[5]
Sweden	0.2 mg/ml	high (17% of inhabitants)	about 10% (SUNflower 2002)
Finland	0.5 mg/ml	high (34.5% of inhabitants)	16% (2003)
Netherlands	0.5 mg/ml	high (12.3% of inhabitants)	18% (2003)
Luxembourg	0.8 mg/ml	low (4.7% of inhabitants)	14% (2004)
UK	0.8 mg/ml	low (1% of inhabitants)	17.5% (2004)
Ireland	0.8 mg/ml	n/a	n/a
Cyprus	0.9 mg/ml	low (5.3% of inhabitants)	40% (2005)

There is however ample evidence that reductions in BAC limits, supported by effective enforcement and publicity, can reduce drink driving at all BAC levels. Recent changes in **Switzerland** once again confirm this. In Switzerland, the number of road deaths decreased by an estimated 20% from 2004 to 2005. Preliminary findings show that one of the main reasons for this is a 25% reduction in alcohol-related deaths in 2005. On 1st January 2005, the legal BAC limit was reduced from 0.8 mg/ml to 0.5 mg/ml and random breath testing was introduced.

There is ample evidence that reductions in BAC limits, supported by effective enforcement and publicity, can reduce drink driving at all BAC levels.

[5] Unfortunately, the reporting of drinking in accidents is usually incomplete in EU countries. The extent of under-reporting differs from country to country (ETSC 2003).

3 Enforcement across the EU – learning from one another

3.1 SPEED ENFORCEMENT

Speeding is the single most important cause of traffic death and injury across Europe. But available data show that legal limits are insufficiently enforced even in the best performing EU Member States such as the U.K and Sweden. This is the case especially in urban areas. Speeding on rural roads is a particular problem in Lithuania and Poland where these roads seem to serve as a substitute for the underdeveloped motorway network. Speeding on motorways is a problem for Western countries including the UK and the Netherlands (Table 1 in the Annex).

Different Member States must therefore concentrate their efforts on different road types. But speed compliance should be a high priority in all EU countries. Creating a high risk of being caught while speeding is an important element in what must be a more comprehensive strategy to achieve this goal.

3.1.1 Types of checks – traditional and new

There are different methods available to enforce speed limits. Traditional methods rely on radar and laser measurements by mobile police patrols. In new automated enforcement methods, on the other hand, recording devices (camera, video) are used in conjunction with these measurements[6].

Traditional methods have the advantage that drivers are stopped and apprehend by police officers personally and immediately following the offence. But it is difficult with limited police resources to ensure high levels of continuous and widespread enforcement. When enforcement relies exclusively on traditional methods it will therefore usually focus on the most severe speeding offences and take place mainly at high risk sites. As a result, drivers become accustomed to a moderate level of speeding (between 5 and 25 km/h), which will typically be tolerated by the enforcement authorities (ICF Consulting 2003).

To raise the likelihood of speeding offences being detected, traditional methods are therefore increasingly complemented by **automated methods**. These include the use of stationary equipment as well as mobile devices that are used in police patrol cars.

Stationary devices include safety cameras that take a (film or digital) picture of the car either from the front or the back, depending on what kind of evidence is needed for follow-up. Fixed cameras are usually stored in boxes and the camera:box ratio (meaning number of cameras to number of boxes) varies between countries. In Belgium and France this ratio is 1:3, in Germany 1:4 or 1:5, in Poland 1:5 and in the UK 1:6.

In section control systems, two cameras are used. These systems measure the average speed over a certain distance, which is felt to be much fairer than measuring speed at one moment only. In **London (UK)** and **Vienna (Austria)**, section control is used to control speeds in tunnels. Results from the first section control system installed in 2003 in the Kaisermühlentunnel (Vienna) indicate that average speeds in the tunnel have decreased and only some 0.5% of vehicles continue to exceed the speed limit. While there used to be many severe accidents in the tunnel, no accidents involving serious injury or death have occurred since the beginning of the operation. Section control is also used on high risk sections of motorways and national roads in **Scotland** and the **Netherlands**.

Mobile devices, on the other hand, are operated from a police car at the roadside and can be deployed to different locations according to need. Video devices such as ProVida that are installed in (marked or unmarked) police patrol cars can also be used to record the speed of a target vehicle. This type of technology is also increasingly used in EU countries. It is however cost- and time-intensive, which limits widespread use (PACTS 2005).

[6] "Automated speed enforcement" as recommended by the EC Commission entails that a technical recording device is triggered automatically by a speed violation, so that information about the violating vehicle is recorded.

One advantage of automated methods is that they can be applied in spots where conventional enforcement is not possible, for example in tunnels or on motorways. Also, they allow identifying the vehicle (and sometimes also the driver) on the basis of the picture taken and follow-up can take place at a later stage. Most importantly, however, they serve to radically increase the likelihood of speeding offences being detected. Cameras can record even the smallest violations so that the actual limits rather than the limits plus 5 to 25 km/h can be enforced[7].

Automated methods radically increase the likelihood of speeding offences being detected.

This has been shown to be very beneficial for safety. A recent Finnish study has concluded that a large number of minor speeding offences (less than 20 km/h over the limit) cause at least as many accidents as a smaller number of more severe offences (Kallberg 2004). Another study from Germany has shown that tightened speed control has been particularly effective on roads where speeding by less than 20 km/h was observed (Ministry of Interior of North Rhine Westphalia 2005).

As motorists are aware that cameras detect even the smallest of violations, speeding drops radically at fixed camera sites. In **Switzerland**, only 0.4% of motor vehicles passing fixed camera boxes are over the limit. As a result, the number of accidents decreases dramatically at these sites.

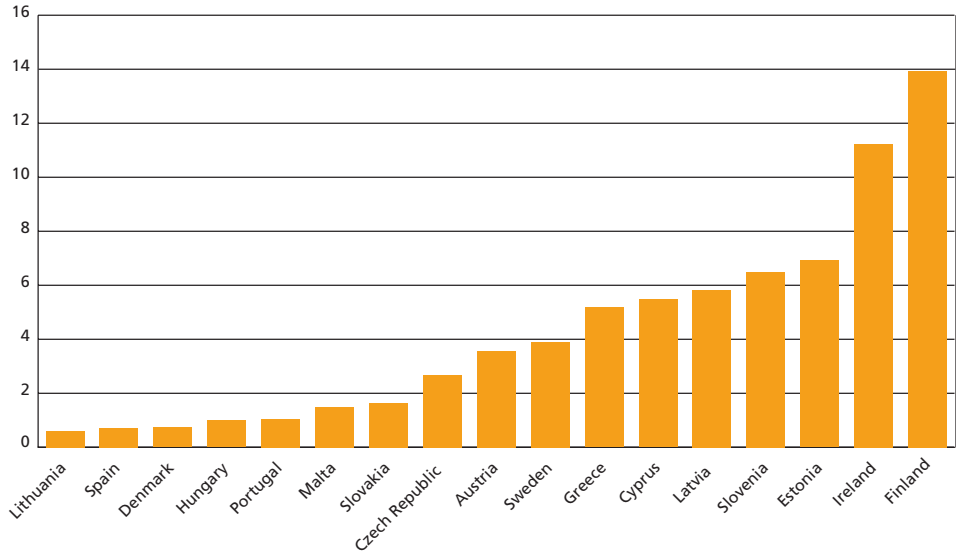
This is obviously due to the fact that most drivers know the location of fixed camera sites. But this is entirely in line with the purpose of these sites - they are there to reduce speeding in accident high risk spots. To achieve this goal, some governments (e.g. in **Belgium**, **France**) also publish the camera location on the Internet.

3.1.2 Levels of enforcement – some do, some don't

Levels of speed checks vary across the EU. Given that the number of vehicles checked for speed is not available for most countries, we looked at the number of speed enforcement devices to indicate the level of enforcement. It appears that **Finland**, **Ireland, Austria, Slovenia** and **Estonia** check high numbers of vehicles.

Finland, Ireland, Slovenia and **Estonia** use mostly mobile equipment such as radar and laser measuring devices. In **Austria**, on the other hand, the focus is on automated (stationary) equipment. Most probably therefore, **Austria** has a higher level of checks, even though less equipment is used than in **Finland** and **Ireland**. This is also true for the **Netherlands** where only the number of fixed speed cameras was reported.

Figure 2 Number of speed enforcement devices per 100,000 inhabitants 2004



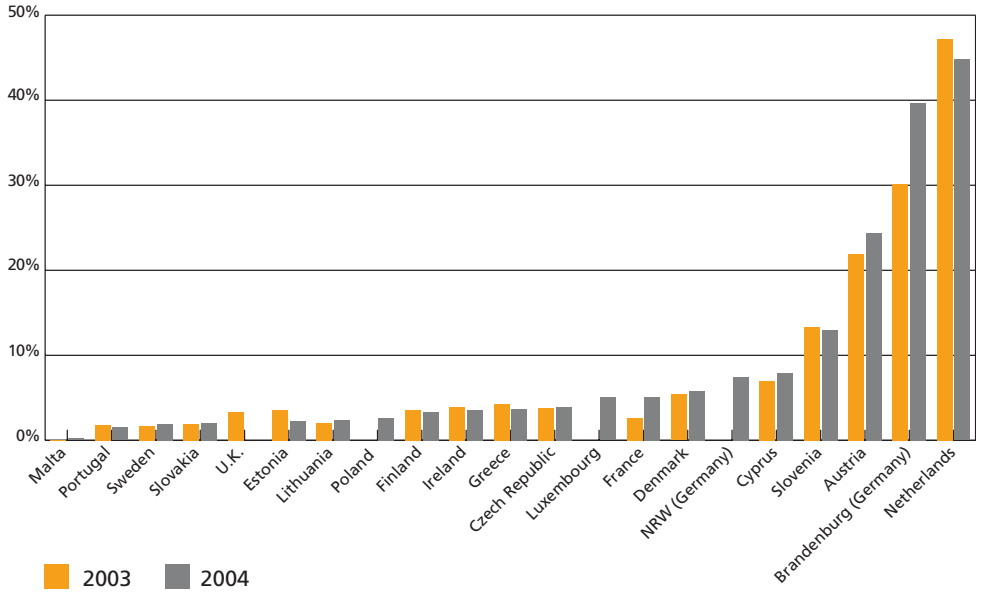
[7] All countries handle so-called technical margins. In Belgium, this is 6 km/h as a minimum. In Sweden, it is 5 km/h for all limits.

In **Finland,** a fairly low number of speeding offences is detected (Figure 3). Only 15% of speeding offences are detected through automated methods. Speed data suggest however that the low level of violations is not only the result of using little automated equipment. In Finland, speeding rates are low (Table 1 in the Annex). Moreover, the level of speeding on rural 80km/h and 100km/h roads has dropped significantly over the last years.

In **Austria**, a much greater number of drivers is penalised for speeding (Figure 3). The number of offences increased from 2003 to 2004. Speeding rates are low and the level of speeding dropped in 2004 on rural roads (but not in urban areas), whereas the level of speed-related deaths remained stable.

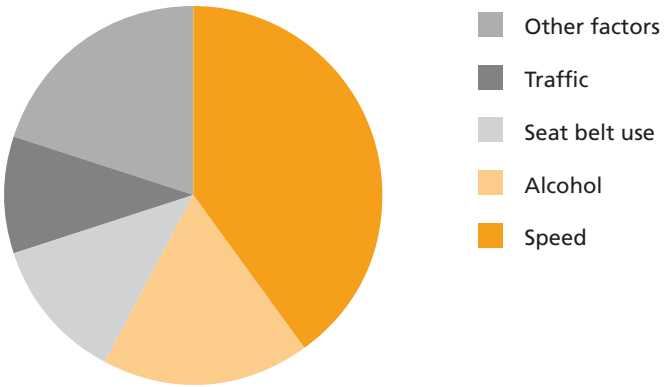
This suggests that in **Finland** and **Austria**, a mix of traditional and automated methods, which is applied at high levels, contributed to reducing levels of speeding in 2004. The difference in the numbers of offences results from the different degree to which automated systems are used.

Figure 3 Speeding offences per population (in %)



The most impressive changes have however been reported from **France** where the complete number of devices is unavailable. In France, automated speed enforcement was first introduced in late 2003. As a result, the number of speeding offences increased steeply (Figure 3, Figure 1 in the Annex) and speeding rates dropped radically for all types of vehicles (Table 2). Improvement in speed behaviour has been identified as the major factor contributing to the 32% reduction in road deaths between 2001 and 2004 (Figure 4).

Figure 4 Quantitative assessment of the main factors of the 21% decrease in 2003. Source: National Interministerial Observatory for Road Safety



Also in **Belgium**, where details are available only for the Federal Police, speed enforcement has been increased using a combination of fixed and mobile, traditional and automated methods. While the number of speeding offences went up, vehicle speeds decreased on all types of road. It is however impossible to say what impact this has had on road safety as detailed data on accident causation have not yet been published.

Table 2. Vehicles speeding by more than 10 km/h in France. Source: National Interministerial Observatory for Road Safety

	2001	2002	2003	2004
Passenger cars	35.4%	34.2%	26.3%	21.9%
Lorries	27.2%	31.5%	23.8%	18.0%
Motorcycles	46.8%	56.5%	42.7%	40.9%

But it is hard to say what part the level of checks has played in improving speed behaviour in these countries. In **Finland**, some speed limits were lowered in 2004 following a severe bus accident that claimed 23 lives. In **Austria**, speed enforcement through section control and the upcoming penalty point system were much in the media. In **Belgium**, there was also a major increase in sanctions and in **France**, news on the automated system of speed control was widely spread. The speed reductions that could be observed in each of these countries must therefore be seen as the result of a more comprehensive approach to speeding (see Chapters 3.2, 4.4, 4.5).

Lithuania, **Portugal** and **Hungary** at the bottom end of Figure 2 have little equipment at their disposal to enforce speed limits. Very little or no automated equipment is used. As a result, few offenders are caught in Lithuania and Portugal (no data were available for Hungary). In Lithuania, the level of speeding is high and speeding has been reported to be a major factor in nearly half of all fatal accidents. Lithuania belongs to the countries with the highest traffic death rates in Europe.

3.1.3 Fixed speed cameras – read the manual

Drawing on the experiences of frontrunners such as the UK, Germany and the Netherlands, fixed speed cameras are increasingly used in EU countries. Today, all countries have at least some fixed cameras with the exception of **Denmark** (where there are however mobile cameras), **Estonia**, **Hungary**, **Slovakia** and **Latvia.** In **Hungary**, the legal basis for the follow-up of offences detected by cameras is being prepared and a pilot scheme was set up in 2005. In **Estonia** there is also a pilot scheme planned, following an agreement between the police and the Estonian Road Administration.

Other countries such a as **France**, **Greece**, **Spain**, **Sweden** and the **UK** are expanding their camera networks. In **France**, this has already led to a steep increase in speeding offences. Comparison with enforcement levels reported by drivers in the latest SARTRE survey shows that French drivers actually reported the lowest level of speeding offences over the three years preceding the survey (Figure 2 in the Annex).

This development is very promising as experiences with existing camera schemes have been very successful. In the **UK,** where an important camera scheme has been rolled out since 2001, an independent report was published in late 2005 evaluating the scheme's effectiveness over four years. The evaluation has found that the number of vehicles exceeding the speed limit fell by 70% at fixed camera sites, resulting in an average reduction of around 50% in the number of killed and seriously injured. The number of speeding offences continued to rise during this period.

It is important that countries use fixed speed cameras under well-defined conditions.

It is, however, important that countries use fixed speed cameras under well-defined conditions. This includes strict rules for setting up cameras, ring-fencing revenue from cameras and communication.

In the **UK,** most speed cameras are set up following strict guidelines published by the government. Only if these guidelines are heeded can safety camera partnerships receive back some of the money they used to set up and operate cameras. These guidelines entail, amongst other requirements, that the partnerships, which include police and local authorities, must prove that excessive speed has led to five (now three) deaths at the envisaged camera site.

To achieve better acceptance by the public, the money from speeding fines should also be channeled back into road safety work. This is even more important when enhanced enforcement is coupled with an increase in penalties. In the **UK** most of the revenue from speed cameras is used to cover the cost of the camera scheme. But this financing scheme for cameras has led to the somewhat contradictory situation in which police enforcement through more traditional means cannot recover the cost of enforcement. PACTS suggests therefore that this funding mechanism used for cameras should be applied more widely (PACTS 2005).

In **France**, as in most other countries, the money from fines goes straight to the Treasury. But the country has made a great effort communicating the positive effects of camera enforcement and this has been supported by road safety data that were made publicly available in a timely manner.

In sum, the examples of **Finland**, **Austria**, **France** and **Belgium** have shown that well-designed speed enforcement schemes help to bring down speeding across the network. Evaluations carried out in **France** and the **UK** have moreover shown that speed cameras can help to substantially reduce casualties from speeding and that these safety effects may already be felt at a point when the number of speeding offences is still increasing. In the **UK** however, the positive effects from enforcing speed limits have been partly offset by less successful action in other fields such as drink driving.

Speed cameras can help to substantially reduce casualties from speeding. These safety effects may already be felt at a point when the number of speeding offences is still increasing.

3.2 DRINK DRIVING – EVERYBODY IS BLOWING

The second greatest cause of road deaths, often mixed with speeding is drink driving. In the EU as a whole, around 2-3% of journeys are associated with an illegal BAC, resulting in 30-40% of driver deaths (ESCAPE 2003, ETSC 2003).

According to the most recent SARTRE 3 study, enforcement activity is however fairly low across Europe (Figure 2 in the Annex). In this survey, which was conducted in 23 European countries, only 26% of drivers said that they had been tested for alcohol over the last three years, whereas 71% of drivers said they had not been tested during the same period.

3.2.1 Random screening

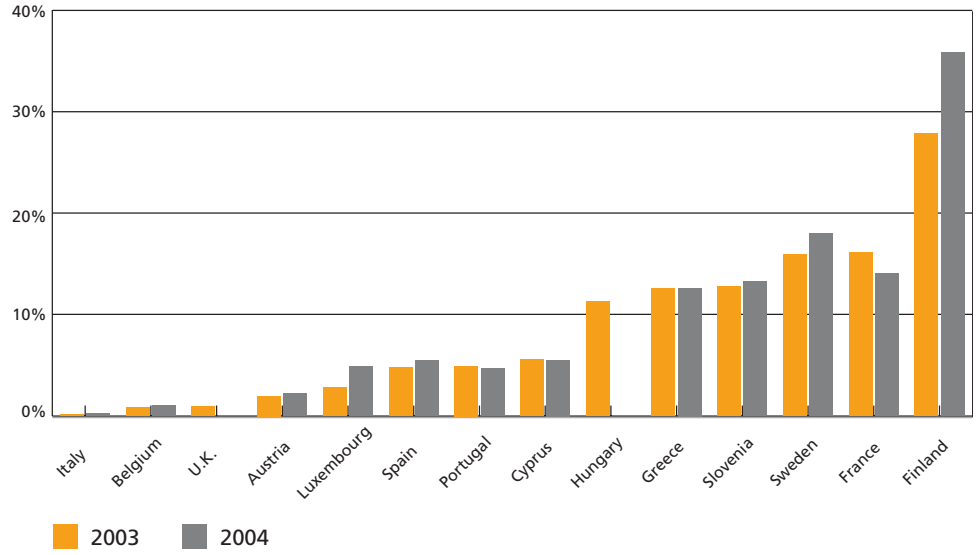
The highest levels of drink driving checks are found in **Finland, Estonia, Sweden, France, Slovenia**, the **Netherlands**, **Greece** and **Hungary** (Figure 5). In all these countries, police have been empowered to stop and breath test drivers at random, i.e. without the driver revealing any suspicious behaviour. These so-called random tests may focus on times and places where drinking drivers are likely to be found (targeted testing). This is still a random procedure, because it is not based on individual driver characteristics. Forerunners such as **Sweden, the Netherlands** and **Estonia** also insist on an alcohol test every time a driver is stopped for whatever reason.

In **Finland**, so-called blanket testing was introduced in 1977 whereby a whole road is blocked off and everyone is tested. Today, **Estonia** and **Slovenia** undertake similar large-scale testing. Communication with the media and publicising the results of the activities are also an integral part of this traffic control. The main aim is to vary time and place and ensure that drivers are aware that they may be tested anytime or anywhere. In **Estonia**, these special campaigns are entitled "Everybody is blowing".

If random breath testing is applied, drivers will not only feel that they run a high risk of being tested. They will also understand that all blood alcohol levels over the legal limit will be detected in these tests. Generally, few drivers will test positive in random tests.

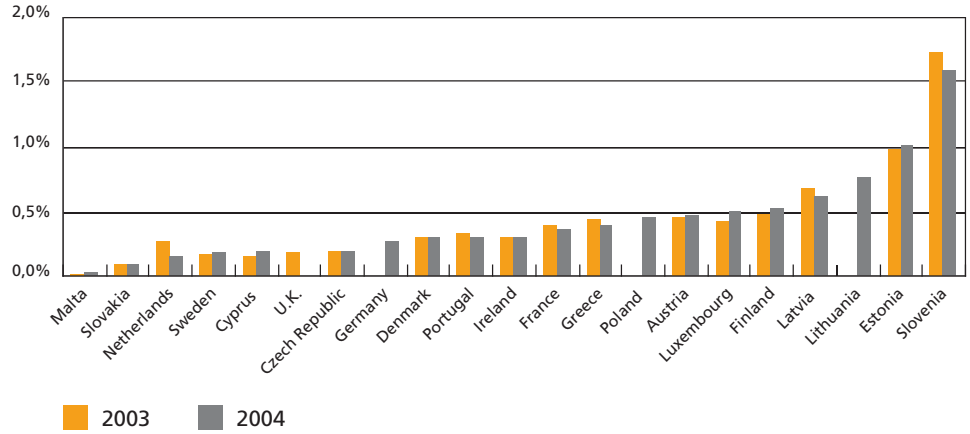
If testing is based on suspicion, on the other hand, chances of being tested will be minimal. Moreover, only drivers that have BAC levels far over the limit will typically be apprehended whereas drivers that have BAC levels that are just over the limit will go unpunished. Worse still, drivers that have a drinking problem will usually not be recognised as such as they are often very skilful in hiding that fact. Consequently, they will not be submitted to a breath test and be allowed to continue driving while posing a serious risk to themselves and other road users.

Figure 5 Drink driving checks per population (in %)



Among those countries that have high levels of checks, **Sweden**, the **Netherlands**, **Finland** and **France** report fairly low levels of offences (Figure 6). In **Slovenia** and **Estonia**, on the other hand, the numbers of offences are still comparatively high[8]. This is because the Northern and Western European countries introduced random breath testing earlier and offences declined as a result. The Eastern European countries introduced this more recently and the levels of offences started to drop later.

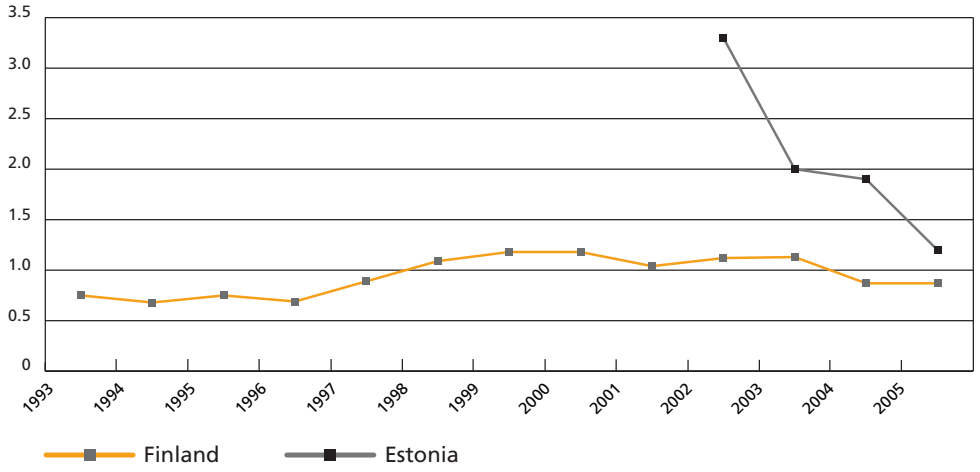
Figure 6 Drink driving offences per population (in %)



[8] **Lithuania** and **Latvia** also have high levels of offences. Both countries undertake random testing but the numbers of tests are not available.

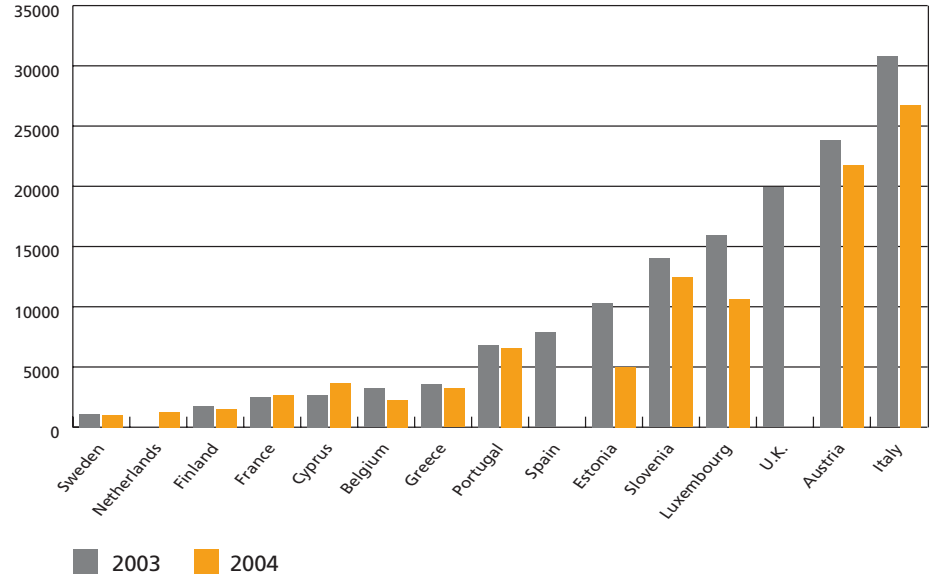
Data on the prevalence of drink driving are available only for very few countries. The example of **Finland** and **Estonia** shows however that both countries have indeed brought back drink driving below the estimated EU average (Figure 7). In the **Netherlands**, yearly figures on the amount of drink driving in the traffic flow at weekend nights show a decrease from around 4.5% to below 4% following an increase in drink driving enforcement after 2002.

Figure 7 Drink driving in Finland and Estonia. Source: Liikenneturva, Monitoring of traffic behaviour 2005. STRATUM, Road user behaviour 2005



The **UK, Austria**, **Luxembourg**, **Spain**, **Portugal** and **Cyprus**, on the other hand, are among those countries where few drivers are checked annually (Figure 5). This is also true for **Italy** and **Belgium** where complete figures are unavailable. Moreover, in **Italy**, **Austria**, the **UK** and **Luxembourg** a large proportion of alcohol tests result in a drink driving offence being sanctioned (Figure 8). In these countries, police obviously test drivers based on suspicion, no matter whether random testing is permitted or not.

Figure 8 Offences sanctioned per 100,000 screening tests



The **UK** does not legally allow random breath testing. Police can stop any driver but can carry out a breath test only if there has been a road traffic offence, an accident or if they suspect that the driver has been drinking. The level of breath testing has dropped over the last years and numbers of drink driving deaths, which fell by two-thirds to about 550/year over the 15 years to the mid-1990s, have not fallen further since then and now show signs of rising. In the proposed Road Safety Bill no mention is made of giving police wider powers so they can carry out tests at locations where it is reasonable to assume an amount of drinking may have taken place.

The **UK**, **Luxembourg** and, until recently, also **Cyprus** moreover combined low levels of checks with a high legal BAC limit (0.8, 0.9 mg/ml). In March 2006, **Cyprus** lowered the limit to 0.5 mg/ml.

But there are signs that EU countries increasingly turn to random breath testing. **Italy** introduced random breath testing in 2003 and according to data available the number of checks carried out by the National Traffic Police and Carabinieri increased between 2003 and 2004 by nearly a third. **Denmark**, one of the countries where random testing was not allowed earlier, introduced a new strategy in 2003 by which police test drivers automatically and without suspicion. In **Ireland**, the government is also considering the introduction of random breath testing. But further deliberation on the legal problems associated with random breath testing is still needed.

The example of **Switzerland** shows that the level of offences declines when police are empowered to randomise tests. In this country, the level of drivers tested positive used to be about 25% (including those tested in accidents) but was only 7.6% in 2005. In the same year, drink driving deaths dropped by around 25%. This has been seen as the consequence of a new Road Traffic Bill that empowered police to test drivers without suspicion. The Bill entered into force on 1st January 2005.

3.2.2 Evidential breath testing

Random testing, due to the large number of drivers tested, is typically done with the help of screening devices, which cannot usually serve to produce legal evidence. As a second step, evidential testing is carried out. To cope with large numbers of offences, devices have been introduced that are based on breath rather than blood samples. **Sweden**, **UK** and the **Netherlands** have used these devices for some time already. But other countries such as **Cyprus, Finland, Hungary, Italy, Portugal** and **Spain** have also introduced them.

Today, new mobile precision breathalysers are available which allow evidential breath testing at the roadside. By using these devices, police must no longer take drivers who have failed the screening test back to the police station and can thus save valuable time. This practice is common in **France**, and the **UK** is planning to introduce evidential roadside testing once the new mobile devices have gained type approval.

In conclusion, best results are achieved in countries that run random alcohol screening tests in conjunction with evidential breath testing. In **Finland**, **France**, **Sweden** and the **Netherlands** this has helped to reduce road traffic casualties significantly. Good results have also been achieved in some Eastern European countries such as **Slovenia**, **Estonia** and **Hungary** where the fight against drink driving has been a priority but its effects have sometimes been offset by less successful action in other fields such as speeding.

3.3 SEAT BELT WEARING – BETTER CHECK TWICE

One of the areas given lowest priority is the enforcement of seat belt wearing, despite the fact that seat belts have been proven to have an enormous life saving potential. A recent study has estimated that 100% seat belt use could prevent 6,000 deaths and 380,000 injuries every year in the EU-15 (ICF Consulting 2003). But it appears that the safety effects of even a few percentage points increase in belt use rates were not fully understood by authorities until recently (GADGET 2000).

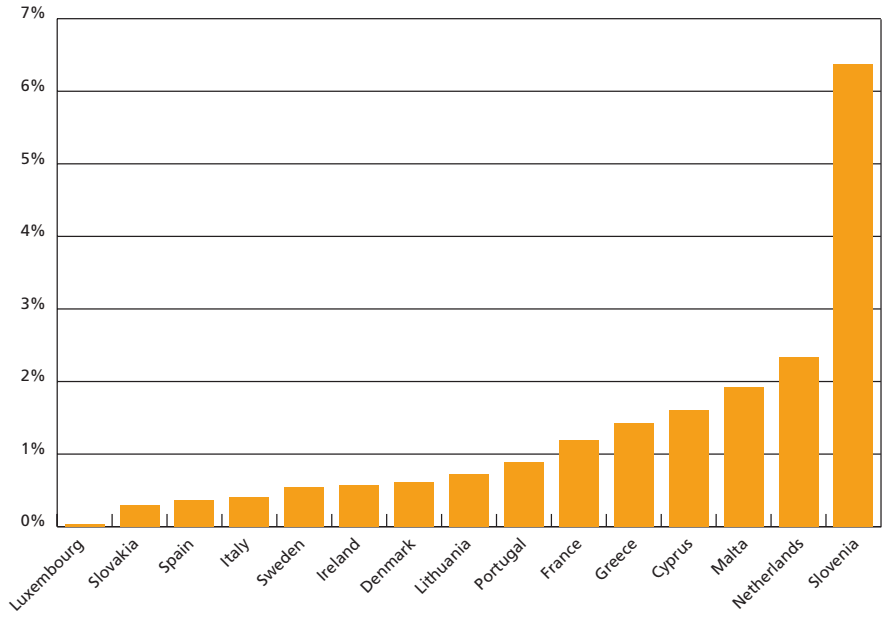
3.3.1 *Blitz* actions

The best way to enforce seat belt use is through intensive and highly visible specific seat belt actions. Such '*blitz*' enforcement should last only one to four weeks and be repeated several times a year. These intensive enforcement actions can also be combined with other enforcement actions, for example on drink driving. This can be more efficient and cost-effective in terms of the use of police resources.

The best way to enforce seat belt use is through intensive and highly visible specific seat belt actions.

Few countries report to be undertaking such rigorous and frequent checks. These include **Slovenia** and the **Netherlands** but also the land of **North Rhine Westphalia (Germany)**, where special enforcement operations focusing on the use of seat belt and child restraints were run three times during two weeks in 2005.

Figure 9 Seat belt offences per population 2004 (in %)



As a result, the **Netherlands** and also **Slovenia** have been able to increase their wearing rates more than other countries. For **Germany**, only country wide figures are available.

Most countries do not undertake any specific efforts to check seat belt use.

Most countries, however, do not undertake any specific efforts to check seat belt use. This lack of interest in enforcing seat belt use in many countries has sometimes been linked to the fact that penalties are very low. Some countries have indeed managed to substantially increase wearing rate when sanctions were increased or fines applied more rigorously. This is the case in **Belgium** and **France**, were an increase in fines has certainly played a role in raising levels of enforcement and compliance.

The European Traffic Police network TISPOL has also been very successful at raising the profile of this particularly low priority issue. By co-ordinating international *blitz* actions, TISPOL has encouraged countries to set up separate seat belt wearing operations. In 2005, more than 19 out of 25 EU countries took part in an operation that was run between 10 and 16 April. Campaigns on speeding and drink driving were also organised.

However, seat belt wearing is increasing in all EU countries, but not all countries dispose of basic compliance information that is needed to guide enforcement efforts. Countries that must introduce regular seat belt wearing surveys to collect such data include **Latvia, Lithuania, Cyprus, Slovakia** and **Italy**.

These data are needed to enable enforcement to focus on particular needs such as specific seats (front or back), target groups (young or old) or types of road (urban or rural). Based on this type of data, **Malta** and **Poland** have dedicated specific efforts to increasing the wearing rate in the rear seats. The obligation to use belts in these seats has been new to many of the EU entrants. An interesting example of best practice is **Malta** that has been successful in outsourcing seat belt enforcement to local Council wardens who have had the power to stop and fine offenders since 2002.

Figures on how many lives could have been saved if victims had used their seat belt are unavailable or unreliable in most EU countries. A notable exception is **France** where this type of data is published yearly (Table 3).

Table 3 Deaths attributable to the non-use of seat belts in France. Source: National Interministerial Observatory for Road Safety

	2002	2003	2004
Lives lost due to non-use of seat belts	870	612	585
Percentage of total deaths	12%	10.7%	11.2%

Countries that have higher compliance rates also have lower death rates.

But comparison of the general level of safety (Figure 1) and the seat belt wearing rates (Table 2 in the Annex) shows that, in most cases, countries that have higher compliance rates also have lower death rates.

The **UK, Sweden** and the **Netherlands**, but also **Finland** and **Germany** have high rates both in the front and in the back seat. These countries are among the safest in Europe. **Spain**, **Portugal**, **Slovenia**, **Estonia** and **Poland** have lower rates, especially in the back. They all have a relatively high level of traffic deaths. No rates at all are available for **Latvia, Lithuania, Cyprus, Slovakia** and also **Italy** most of which are among those countries that have the highest death rates in Europe.

This shows that more effort must be put into raising seat belt wearing rates particularly in those countries where compliance is low or rates are unavailable. Compliance rates must be collected in all countries.

3.4 FOLLOW-UP OF OFFENCES

The EC Recommendation on enforcement rightly stresses that the follow-up of detected offences should be "effective, proportionate and dissuasive".

3.4.1 Effective sanctioning – close the loopholes

If enforcement is to be effective, drivers must be certain to be penalised.

If enforcement is to be effective, drivers must be certain to be penalised. Technically speaking, this is less of a problem in the areas of drink driving and seat belt offences. But it proves much more difficult in the area of speeding where more and more offences are being detected not by police officers but by automated systems.

The main challenge for the follow-up of speeding offences detected by cameras is that the owner of the vehicle that can be identified on the basis of the number plate may not be the driver. In the **UK** and **France** the follow-up relies on the owner identifying the driver. In **France**, the appeal rate is only 0.8% and more than 99% of fines under this system are paid without any problem. Also in the **Netherlands**, the appeal rate is no higher than 1%.

In other countries such as **Germany** and **Poland**, follow-up relies on driver liability. If the driver differs from the owner of the car, police have to undertake an investigation. Although the appeal rate is under 10% in **Germany**, those few cases cost valuable police time which should be invested in detecting offences. Moreover, drivers know that the procedure will be stopped if the offender cannot

be identified and will therefore not co-operate in all cases. In **Poland**, a new law has recently been prepared that may change this situation.

Research has also found that long-term behavioural effects from speed enforcement are only achieved if the detection of a violation is followed by immediate feedback or punishment (ESCAPE 2003). To make this possible, minor offences detected by cameras should be followed up by simplified procedures. In these procedures, detection, prosecution and sanctioning are essentially combined into one stage, and a small range of fixed sanctions apply. This has been introduced in the **Netherlands, UK, Austria, Germany, Denmark, Finland** and **Sweden**. In cases of very serious speeding offences or repeated offences, the application of penal law is of course still possible (ESCAPE 2003).

In the **Netherlands**, a huge number of sanctions are issued every year through administrative procedures. Statistically, every one of the ten million driving license holders received an administrative fine in 2004, including sanctions for all types of traffic offences. Most procedures are dealt with by a single national agency, the Central Judicial Collecting Agency (CJIB), which employs some 800 staff. The combination of a high number of checks coupled with swift follow-up seems to have paid off. In 2004 400,000 fewer people were sanctioned for speeding than in 2003 while level of checks was raised over the same period.

The follow-up process does not run quite as smoothly in other countries. In **Poland**, sanctioning of drink driving relies on legal procedures. As a result, drivers often use their right to appeal. Moreover, the level of sanctions can vary considerably from court to court and it is not always clear to drivers that the expected sanctions will indeed be appropriate to the risk related to the offence they committed.

In **Slovenia**, traffic offences were dealt with exclusively under penal law until 2005, causing an important backlog of cases in courts. As traffic offences are classed as 'minor offences' they were not prioritised for action. If they are not dealt with in 2 years then they are cancelled. In 2005, a new law on minor offences came into force which empowered the police to give on-the-spot fines for traffic offences and withdraw penalty points from drivers' licences.

3.4.2 Proportionate sanctioning – show the risk

It is however important that the level of sanctions is according to the risk related to non-compliance. This is also important to motivate police officers in their work, although research has found that higher sanctions have less of an impact on safety than the level of enforcement (SUNflower 2002).

It is important that the level of sanctions is according to the risk related to non-compliance.

In many EU countries, sanctions are still inconsistently related to risk, especially as regards the non-use of seat belts and speeding. Seat belt offenders often get away with a warning, and especially in **Austria** and **Germany** speeding offenders pay a fine that has little to do with the risk that is caused by the offence (Table 4).

Table 4 Minimum penalties for speeding offences outside built-up areas in some EU countries

	Exceeding the limit by 16 km/h	Exceeding the limit by 21 km/h
Austria	35 euros	29-70 euros
Belgium	80 euros	105 euros
France	68 euros	135 euros
Germany	30 euros	40 euros
Italy	143 euros	143 euros
Netherlands	70 euros	100 euros

In some cases it can also be more effective to impose a remedial measure in combination with a sanction. This is especially true in cases of severe drink driving where the offender has a drinking problem and where traditional sanctions would not be sufficient to solve this problem. It is important to address this issue as drivers with a high BAC level (over 1.3 mg/ml) make up a small proportion of drink drivers but are responsible for a very large proportion of alcohol-related deaths (ETSC 2003).

Finland started a three year field trial on 1st July 2005 to test the effect of alcohol ignition interlocks in a driver rehabilitation programme. Persons who have been caught drink driving are offered the possibility of taking part in the trial and then receive a temporary "alcolock driver's licence". They have to take part in regular tests for alcohol dependency during a one year period. The offenders pay the expenses of the equipment themselves.

3.4.3 Dissuasive sanctioning – get high risk drivers off the road

With some drivers enforcement will however not have the effect of deterring non-compliance with safety rules. These drivers will continue breaking the law unless they are stopped. Specific efforts must therefore be targeted to these 'high risk drivers' just as they must be targeted at 'high risk times' and 'high risk locations' (see previous chapters). Specific efforts must be made to get these drivers off the roads.

To single out and discourage repeat offenders, many countries have set up penalty point systems (Table 3 in the Annex). Although the systems vary widely the aim is similar, namely that repeated bad driving behavior eventually causes the suspension or loss of the driving license. The underlying rationale is that financial penalties often have a low deterrent effect amongst high income individuals. But all drivers attach value to their possibility to drive and thus fear losing their driving license even for a short period of time. Penalty point systems are able to significantly reduce accidents, especially when they are combined with other tools such as warning letters and license suspension (Elvik and Vaa 2004).

In addition to the existing system of fines and withdrawal of driving licences, **Austria** introduced a new penalty point system for thirteen traffic offences with high accident rates and risk on 1st July 2005. The system is based on on the "three strikes and you are out" concept. If a driver commits the same traffic offence for the second time within two years, he or she will face specific measures such as driver improvement or re-education courses. In case of a third offence within two years, they will lose their driving licence for at least three months. The Austrian Road Safety Board (KfV) expects that the new system will lead to a reduction of 75 road deaths per year.

In the **UK** the number of fixed penalties issued to speeding has grown massively over the last 10 years, but the number of people disqualified from driving has remained relatively stable. This suggests that the deterrent effect of penalty points may be considerable (PACTS 2005:52).

In **Ireland** and **Italy**, penalty point systems have been introduced more recently. As a result, road safety levels improved quickly, but experiences in both countries show that this initial effect can wear off rapidly if the system is not sustained by an integrated approach to road safety (Lewanski 2005, SWOV 2005).

Also, not all systems are equally effective. With some systems, only a very small proportion of points are withdrawn or added even for serious traffic offences. This is why countries such as **France** and **Hungary** have recently tightened their systems. Moreover, not all systems include points for offences such as the non-use of seat belts or speeding. In **Germany** and **Austria**, for example, seat belt use is not included in the penalty point system but in **Ireland, Latvia, France** and **Hungary** this is the case. In **Germany** and **Austria**, minor speeding violations are not included either, whereas in **Ireland** and **Italy**, these offences have carried penalty points since the introduction of the new systems.

In **Ireland** and **Germany**, some insurance companies have also shown interest in linking motor insurance premiums to the level of penalty points. Research carried out by the Federal Highway Research Institute (BASt) has found that this should be trialled in Germany as it could also serve to stimulate safe driving (BASt 2005).

In the **Netherlands**, no penalty point system exists. The Dutch system deals with repeat offences only if they fall under the same category. This includes major speeding and drink driving offences, but no minor speeding offences or the non-use of seat belts. If a driver is guilty of a serious traffic offence for the second time in a year the case will be brought before court.

Clearly, much must be done in EU countries to ensure that once an offence has been committed, an appropriate sanction is issued as quickly as possible. Moreover, a pressing problem with the growing use of safety cameras is the need to introduce full owner liability for speeding offences. Countries such as **Denmark, Estonia, Germany, Italy, Latvia, Poland, Sweden** and the **UK** should change their laws in that respect to close up the legal loophole and prevent drivers from speeding and avoiding their sanctions. Finally, all countries should devise effective penalty point systems and might introduce on trial basis rehabilitation schemes to tackle the problem of hardcore recidivists.

A pressing problem with the growing use of safety cameras is the need to introduce full owner liability for speeding offences.

3.5 INFORMATION – PEOPLE WANT TO KNOW

To support the effects of police checks it is vital that these checks are accompanied by information on the checks themselves and their results, but also on the safety risks related to non-compliance.

3.5.1 Checks must be visible and publicised

To raise people's awareness that their compliance is being checked, enforcement must be highly visible and publicised. Research indicates that it is the drivers' ´subjective risk of being caught that must be increased if enforcement is to be successful (ESCAPE 2003). This is why changes in the enforcement policy should be widely communicated. In **France,** progress in speed behaviour started already during 2003 before the first camera was even introduced. "Advertising the automatised speed control in the media has been at least as effective as the system itself," a French police official stated.

Drivers should also be informed of concrete enforcement actions, for instance through roadside signs indicating that speed is being checked by radar or through the media such as newspapers, radio or TV (ETSC 1999).

Police should also report the results of these activities to the media. In **Greece**, the police send monthly figures on speeding offences and alcohol checks and offences to the press. Some countries have taken this one step further in order to name and shame offenders to prevent further offences. This is the case in **Estonia**, where all the names and birthdates of punished drink driving offenders are displayed on the homepage of the police.

It is also important to communicate the positive effects of enforcement on road safety to the public.

Finally, it is also important to communicate the positive effects of enforcement on road safety to the public. Collecting and communicating data illustrating the success is crucial to ensure public support for this measure. In **Portugal**, the General Directorate for Traffic (DGV) and the Guardia National Republicana (GNR) publish a weekly record of accidents, casualties and alcohol and speed enforcement activities on their websites for journalists and to inform the public.

In **Austria,** the Ministry of Interior publishes weekly accident statistics on its website including information such as where the accident happened, who was involved and what the likely cause of the accident was. The accident figures are also compared with the exact findings of that week, the previous year, enabling comparisons to be made. Bi-annual press conferences are also held presenting the findings and analysis of road accident data.

3.5.2 Checks must be accompanied by campaigns

Traffic law enforcement is not only about catching and apprehending offenders. What guides people's behaviour is not only the fear of being caught but also their understanding of the road safety rules themselves and of the risk related to breaking these rules. The majority of road users want to comply with these rules not to avoid fines but simply to abide by the law (ESCAPE 2003:27).

To ensure people respect the rules and understand the reasoning behind them, awareness raising campaigns should be organised alongside enforcement actions. This is often the responsibility of some specialised campaign body but can also be done by the police themselves. Because police tasks in accident prevention include not only patrolling the roads and enforcing the law but also promoting road safety (ACPO 2002).

If campaigns are organised by institutions other than the police, co-operation between these authorities is key to success. More and more countries including the **UK**, the **Netherlands**, **Luxembourg** and **Poland** are introducing campaign calendars to co-ordinate actions of the different actors.

The EU supports campaigns such as "EuroBob" where a driver is designated not to drink and to chauffeur others home. This was started in Belgium and now runs in 13 different Member States. Another EU wide campaign is "Euchires" that is based on the Dutch armadillo ('gordeldier') campaign to raise seat belt use among children.

In the **UK,** the Department for Transport has a long experience of organising campaigns to increase the use of seat belts and child restraints, pre-dating compulsory use. Campaigns are organised in conjunction with the police and use a number of approaches and media including TV and radio ads, posters and leaflets, inserting seat belt use stories in popular soap operas and targeting specific audiences such as young mothers in mother and baby magazines. Evaluation of the material is done through focus groups before and after every campaign.

While many campaigns are run in EU countries that point out the risks of drink driving and not using seat belts, few campaigns focus on speeding. The latest SARTRE survey of drivers' attitudes to road risk has shown that drink driving is less and less socially accepted. Also more drivers feel uncomfortable when not wearing their seat belt. But drivers admitted more easily to speeding in 2002 than they did in earlier surveys, especially in built-up areas but also on rural roads (Ewers 2004). There is "no public mental link between speeding and death", as a UK police officer has put it (PACTS 2005). Drivers still distinguish between 'ordinary, safe speeding' and 'dangerous speeding'.

Planning and co-operation between different actors is crucial in determining the success of combined enforcement and information campaigns.

Aside campaigns, information about the risks of unsafe behaviour should also be passed at a local level. A recent German study has shown that speed enforcement in combination with roadside posters pointing out the vicinity of schools and living areas is the most effective means to change drivers' behaviour, compared with controls or information alone (Engeln et al 2005).

To conclude, planning and co-operation between different actors is crucial in determining the success of combined enforcement and information campaigns in the areas prioritised by the EC Recommendation.

3.6 CROSS BORDER ENFORCEMENT – THERE IS NO ESCAPE

There is increasing evidence from different Member States that non-resident drivers flout traffic laws when traveling abroad as they do not fear punishment. The implications are twofold: firstly, their dangerous behaviour can lead to road accidents, and secondly it raises criticism in the country they are traveling as police are not always able to fairly apply the sanctions. A uniform European approach is sorely needed especially as international traffic continues to grow. The problem exists and is particularly serious in transit countries. For example in **France**, in the first four months of operation of the national speed enforcement system, approximately 25% of the violations were committed by vehicles registered outside France.

Today, few countries exchange information on foreign offenders in a systematic way. These include **Germany**, the **Netherlands**, **Luxembourg**, the **UK** and **Latvia** that all use the European Car and Driving License Information system (EUCARIS). Otherwise, bi-lateral and multi-lateral agreements exist between some Member States, which have many different requirements.

France started on 21 January 2005 to send speeding tickets based on automated camera detection to Luxembourg residents. The procedure is based on an informal agreement between France and Luxembourg under the Schengen Treaty. On the basis of the licence plate number, the Luxembourg police provide the French colleagues in the police and customs co-operation centre with the contact details of the vehicle owner.

Many countries such as **Cyprus**, **Estonia**, **Italy**, **Portugal, France, Germany, Netherlands and the Czech Republic** report an increasing number of non-resident offenders. They are not able to follow up offences committed by them effectively and efficiently.

Slovenia, geographically positioned at the gateway to South-Eastern Europe, has a sizeable number of goods vehicles and tourists travel through the country every year. Most non-resident traffic offenders are dealt with by police on the spot (13,341 of 15,757 in 2004). Serious offences are taken to court and dealt with on the same day (2,366 in 2004). This immediate court referral also applies for Slovene drivers who are heading out of the country. Of the total cases dealt with in 2004, 3.3 % were non-resident drivers.

The EC Recommendation also includes requirements on addressing these cross-border aspects. Member States are asked to set up Enforcement Co-ordination Points to ensure that serious or repeated offences committed by non-resident drivers are reported to the competent authority of the Member State in which the vehicle is registered. Moreover, countries are working to transpose the Council Framework Decision on the Application of the Principle of Mutual Recognition to Financial Penalties (2003) (COPEN 24). This Decision applies to traffic offences carrying penalties over 70 Euros. It will be particularly important as countries across Europe move to introduce more safety cameras as police do not follow up such offences on the spot, rather a letter for payment of a fine is sent to the offender.

Research funded by the European Commission on cross-border enforcement was pushed forward with the establishment of an important principle by the first VERA study (VERA 1998) on the harmonisation of enforcement across the EU. The so-called VERA principle stated that: "All legal processes have to be concluded in the Member State where the violation took place. If, once these processes are complete, the penalty incurred cannot be enacted on the vehicle/driver responsibility, the power to enforce the penalty can be delegated to the Member State where the vehicle owner/driver is resident." Further research progress has since been made to cover the mutual recognition of financial penalties by the VERA 2 study (VERA 2 2004). Another project entitled CAPTIVE examined the current multi-lateral and bilateral instruments and proposed recommendations as to how to overcome problems faced on non-pecuniary sanctions such as driving bans, restrictions to drive and criminal penalties.

There is a clear consensus that a common EU approach is needed to tackle non-resident offenders.

There is a clear consensus that a common EU approach is needed to tackle non-resident offenders. This should be developed by the European Commission in the form of a Directive. In the meantime Member States should push ahead with identifying contact points for enforcement as well as collecting data of non-resident offenders in their countries.

4 Conclusion and outlook

4.1 THE GOOD AND THE BAD

This overview has shown that many EU countries are improving their levels of enforcement of speed, alcohol and seat belt legislation. It has also shown that EU countries increasingly apply best practice methods as outlined in the EC Recommendation, especially in the areas of speed and alcohol enforcement. More and more countries are introducing automated speed enforcement, random screening tests and evidential breath tests. But seat belt actions based on the recommended *blitz* approach are much less common.

However, the results are not yet convincing. The following table shows how EU countries perform in combating speeding, drink driving and the non-use of seat belts.

Table 5 EU countries performance in the areas of speeding, drink driving and seat belt use

	Speeding	Drink driving	Seat belt use
Finland	+++++	+++++	+++
Germany	+++	+++	+++++
Netherlands	+++++	+++	+++
Sweden	+++	+++	+++++
UK	+++	+++	+++++
Austria	+++	+++	+++
Belgium	+++	+++	+++
Denmark	+++	+++	+++
France	+++	+++	+++
Luxembourg	+++	+++	+++
Slovenia	+++	+++	+++
Czech Republic	-	+++	+++
Ireland	+++	-	+++
Malta	+++	-	+++
Portugal	+++	-	+++
Estonia	-	+++	-
Greece	-	+++	-
Hungary	-	+++	-
Italy	-	+++	-
Latvia	-	+++	-
Lithuania	-	+++	-
Slovakia	-	+++	-
Spain	-	-	+++
Cyprus	-	+++	-
Poland	-	-	+++

-	needs to do more
+++	is improving
+++++	is a champion

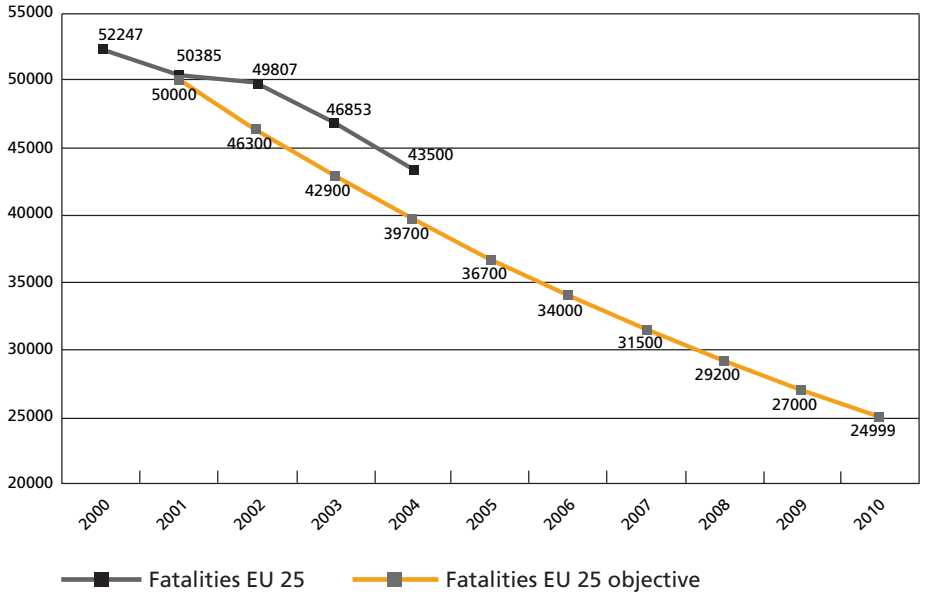
4.2 EU STANDARDS FOR ENFORCING ROAD TRAFFIC RULES

There is still a long way to go to reaching the EU target of halving annual road deaths by 2010. This target has not been subdivided into specific targets for EU Member States. If this were the case, some of the national targets would have to be more ambitious, taken into account that countries with a

high road safety level will not be able to reach a 50% reduction. Countries with a poor road safety record should therefore achieve higher reductions to reach the overall EU target. But none of the national targets is more ambitious than the EU target and most countries are far off reaching even these targets.

The European Commission estimates that between 2001 (the baseline for the 2010 target) and 2005 a 17.5% reduction in traffic deaths was achieved across the EU-25 (EC 2006). Relying on "business-as-usual" annual reduction rates will therefore no longer suffice. To reach the EU's road safety target, real efforts are needed by all EU Member States.

Figure 10 Road death reductions in the EU-25 compared with the target. Source: CARE



The EC Recommendation has helped to raise the profile of traffic law enforcement in the EU countries. It has stimulated discussion and best practice exchange especially in the Expert Groups set up in 2004. In some Member States, such as Germany, it has also led to an improved co-operation between the different actors involved. Member States should therefore continue the implementation of the Recommendation. They should work on a National Enforcement Plan and prepare the reporting of activities undertaken in the years 2005 and 2006, based on the revised Annex II of the EC Recommendation, to allow monitoring of the Recommendation's implementation by the European Commission.

The EC Recommendation has helped to raise the profile of traffic law enforcement in the EU countries.

But to ensure that all Member States achieve high standards in enforcement, the European Commission should also prepare a Directive that includes minimal requirements in all areas covered by the Recommendation, including also the follow-up of offences and information linked to enforcement. These requirements should be based primarily on outcome, i.e. compliance.

Compliance targets have been introduced in some European countries as parts of their road safety strategies, but they are not of a legally binding nature. In **Sweden**, a 27% reduction in the percentage of tested positive in police checks on drink driving was set as a target in the 1995-2000 National Road Safety Programme. In actual fact a 40% drop was achieved (ETSC 2001). More recently, **Poland** and **Belgium** also introduced compliance targets in their road safety strategies. In **Poland**, the frequency of speeding should be no more than 22% by 2013 on all types of road. The proportion of traffic deaths caused by drunk road users should be no more than 6% and the seat belt wearing rate should be 95% for the front seats. In **Belgium**, there should be by 2010 no more than 3% of people driving with an illegal BAC at any moment of the week. By 2005, 67% of front seat occupants and 55% of rear seat occupants should wear seat belts. In 2010, this should be 87% and 75%.

But there should also be some technical requirements to help countries increase compliance in a first phase.

General

- Prepare enforcement plans with yearly targets for compliance.

Speeding

- Conduct mobile checks to deter speeding across the network.
- Use stationary camera equipment in places where speeding causes a high level of accidents.
- Channel revenues from camera enforcement back into road safety work.
- Collect quarterly speeding rates for all types of road, based on the example of France.
- In a first phase, allow no more than 20% of vehicles speeding across the network. In a second phase, speeding rates should be zero.

Drink driving

- Set a legal BAC limit of no more than 0.5 mg/ml.
- Introduce random breath testing to complement enforcement based on suspicion.
- Introduce evidential roadside breath testing.
- Introduce obligatory testing for alcohol in all collisions dealt with by the police.
- Collect rates of drink driving, based on the example of Finland and Estonia, and/or rates of traffic deaths from accidents involving drunk drivers.
- In a first phase, allow no more than 2% of drunk drivers in the normal traffic flow. At a later stage, drink driving rates should be zero.

Seat belt use

- Conduct intensive actions of 1-4 weeks, which must take place at least twice a year.
- Systematically check seat belt wearing in all police checks.
- Collect yearly seat belt wearing rates for the various road and occupant categories (driver, front and rear passengers).
- In a first phase, allow no more than 5% non-compliance for the front seat, no more than 10% in the back seat. At a later stage, seat belt wearing rates should be 100%.

Follow-up of offences

- Allow an appeal rate of no more than 1% for fixed penalties for speeding violations.
- Introduce a set of fixed penalties for minor speeding, alcohol and seat belt offences.
- Include speeding and seat belt wearing offences in penalty point systems, where they exist.
- Introduce rehabilitation programmes to address recidivism in case of drink driving and speeding.

Information

- Publish the results of dedicated enforcement actions on the relevant Police websites.
- Prepare an annual enforcement and information campaign calendar with all key actors including actions in all three areas (speeding, drink driving, seat belt use).

The compliance rates required in the first phase are aimed at reaching the short-term EU target for 2010. The requirements for full compliance are however based on a long term target of reducing road casualties *as much as possible*. This is based on the Swedish Vision Zero that states that responsibility for traffic safety cannot solely be on the user. While the final responsibility for safe behaviour will of course always be on the individual user, all actors including also public authorities and industry have to take up their share in this.

Public authorities have to devise a road transport system that limits the scope for individual error leading to death and injury. This must be supported by industry that should design motor vehicles in a way that unsafe behaviour is largely excluded. In the past, industry has been very apt at enhancing the protection of car occupants – and even pedestrians – in crashes when this was first stimulated and then legally required across the EU. There can be no doubt that they will also improve motor vehicles to meet behavioural requirements if the authorities create a demand for this.

In relation to speed, there are a number of ways in which greater compliance can be achieved. Public authorities can enhance enforcement but they can also decide to put into practice ECMT Resolution 91/5 on the power and speeds of vehicles. This Resolution states, inter alia, that "the appropriate international organisations (UN/ECE, EC) should urgently examine the need to draw up regulations on maximum power-to-weight ratios". The horse power and maximum speeds of vehicles continue to rise. Recent research has shown that maximum speed of the most widely sold car models in Belgium increased by 10% from 1999 to 2004, reaching an average of 181 km/h in 2004 (De Mol et al. 2005). Another way would be to stimulate and then require the use of Intelligent Speed Adaptation (ISA).

4.3 IN-CAR TECHNOLOGIES TO REACH COMPLIANCE

If full compliance is to be reached in all areas including speeding, drink driving and seat belt use, the European Commission must work towards introducing enforcement technologies into motor vehicles in Europe. For each of these areas, smart new technology has been developed that can help to achieve this goal.

Intelligent Speed Adaptation (ISA) technologies warn drivers of breaking the speed limit of the road they are driving on. Different types have been trialled successfully across Europe. But a number of misconceptions have so far barred actual deployment, except in Sweden. At a first stage, it is not advisable to require the use of ISA technologies that cannot be overridden and will therefore stop drivers speeding. But this will be possible in the future (ETSC 2005, ETSC 2006).

Alcohol interlocks are devices that require the driver to take a breath test before the car can be started. They are used in Sweden and Finland to support rehabilitation programmes for drink driving offenders. But they are also more and more used in professional transport companies in Sweden. Alcohol interlocks are also improved to increase user friendliness. In Sweden, introduction is considered in 2012 for all vehicles, including passenger cars. (ETSC 2005, ETSC 2005a).

Seat belt reminders are now fitted to most new cars to warn drivers (and sometimes other occupants) that they have to put on their seatbelt. But stricter systems (interlocks) that stop the car starting so non-use is no longer possible are not currently being discussed (ETSC 2005).

Enforcement and education alone will not lead to full compliance with existing speed, alcohol and seat belt legislation, but the implementation of these new technologies will make this possible. If there has been understanding in the past for tolerating illegal behaviour jeopardising people's lives, there can be no excuse anymore for this at a time when the technical means exist and all that needs to be done is their implementation.

4.4 EU STANDARDS FOR CROSS-BORDER ENFORCEMENT

To tackle the problem of non-resident offenders, EU countries should also continue the implementation of the Recommendation. They should set up Enforcement Co-ordination Points to ensure that serious or repeated offences committed by non-resident drivers are reported to the competent authority of the Member State in which the vehicle is registered. Moreover, countries should transpose the Council Framework Decision on the Application of the Principle of Mutual Recognition to Financial Penalties (2003) (COPEN 24). They should also collect data to establish the size of the phenomena in their country. The European Commission should continue to monitor developments in this field.

The Commission should also envisage legislation to ensure that drivers respect traffic law in whichever EU country they are driving. This should include both financial penalties and driving restrictions such as bans. To make this possible, this legislation should not only require that certain procedures are followed. It should also set up minimal requirements for a harmonised EU wide penalty point system, and align the range (but not the amount) of fixed penalties based on best practice.

Please note that chapter 6 Country pages is downloadable on www.etsc.be.

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5 Annex

Table 1 Speeding in some European countries, 2004

	All limits		50 km/h (UK 30 mph)			70 km/h			90 km/h		
	> limit	> limit plus 10km/h	> limit	> limit plus 10km/h	V85	> limit	> limit plus 10km/h	V85	> limit	> limit plus 10km/h	V85
Austria			50%								
Belgium					57 km/h			86 km/h			94 km/h
Estonia									24.6%		
Finland											
France*	47.8%	21.9%									
Lithuania									43%	19.7%	
Netherlands*											
Poland			75%						54%		
Sweden**	55%	20%	49.2%								
Switzerland			19%		49 km/h						
UK*			53%								

100 km/h (UK 60 mph)			110 km/h (UK 70 mph)			120 km/h			130 km/h		
> limit	> limit plus 10km/h	V85	> limit	> limit plus 10km/h	V85	> limit	> limit plus 10km/h	V85	> limit	> limit plus 10km/h	V85
17.9%			23.2%								
								139 km/h			
			2.8%								
	7.1%										
48.7%	18.1%		30%	14.3%					13.5%	5.4%	
47%						38%					
						30%		125 km/h			
10%			motorways: 56%; dual carriage-ways: 48%								

**Passenger cars and motorcycles **Vehicle mileage*

Figure 1 Proportion of drivers penalised for speeding in the last three years. Source: SARTRE 2004

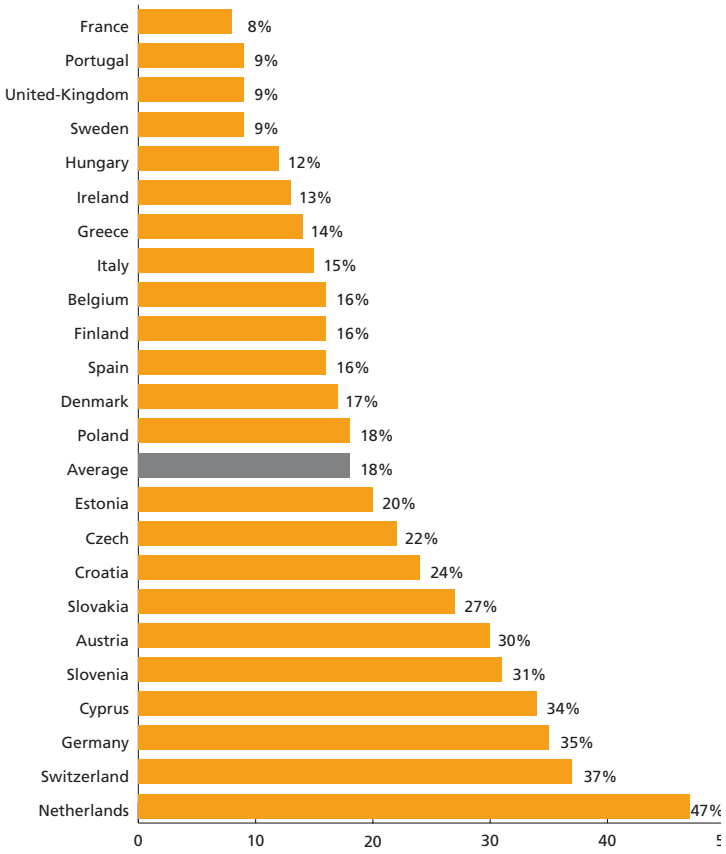


Figure 2 Proportion of drivers who have been checked for alcohol over the last three years. Source: SARTRE 2004

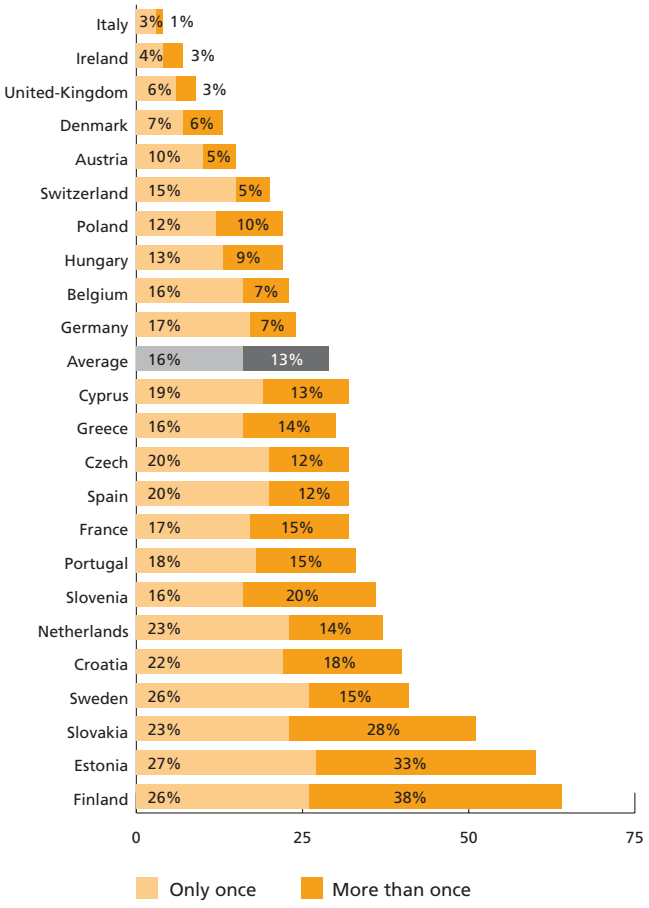


Table 2 Seat belt wearing in the EU. Data are for 2004 unless otherwise specified.

Country	Wearing rate, front seats (%)	Wearing rate, rear seats (%)
Austria	77	56 (adults)
Belgium	66	*not available*
Cyprus	n/a	n/a
Czech Republic	75 (driver)	n/a
Denmark	84	63
Estonia	75	21
Finland	89	80
France	97	68
Germany	94 (driver)	90 (adults)
Greece	40 (2003)	15 (2003)
Hungary	59	20 (2003)
Ireland	85% (2003)	46% (adults, 2003)
Italy	n/a	n/a
Latvia	n/a	n/a
Lithuania	n/a	n/a
Luxembourg	88 (driver)	72
Malta	95 (driver)	43
Netherlands	86 (2003)	63 (2003)
Poland	71	49
Portugal	88 (driver)	25
Slovakia	n/a	n/a
Slovenia	81	40
Spain	86 (2003)	42 (2003)
Sweden	92 (driver)	79
UK	93 (driver)	83

Table 3 Penalty point systems in the EU

Country	Penalty point system
Austria	Yes
Belgium	No
Cyprus	Yes
Czech Republic	from July 2007
Denmark	Yes
Estonia	No (planned)
Finland	No
France	Yes
Germany	Yes
Greece	Yes
Hungary	Yes
Ireland	Yes
Italy	Yes
Latvia	Yes
Lithuania	Yes
Luxembourg	Yes
Malta	Yes
Netherlands	No
Poland	Yes
Portugal	No
Slovakia	No
Slovenia	Yes
Spain	from July 2006
Sweden	Yes
UK	Yes

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