COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels,
SEC(2008) 351/2

COMMISSION STAFF WORKING DOCUMENT

accompanying the

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

facilitating cross-border enforcement in the field of road safety

FULL IMPACT ASSESSMENT

{COM(2008) 151}
{SEC(2008) 350}
TABLE OF CONTENTS

Executive summary
1. Procedural issues and consultation of interested parties ........................................... 5
   1.1 Organisation and timing ......................................................................................... 5
   1.1.1 Reference of the associated item in Agenda Planning or the Work Programme .... 5
   1.1.2 General chronology of the IA and inter-service steering group ......................... 5
   1.2 Consultation and expertise .................................................................................... 5
   1.2.1 External expertise ............................................................................................ 5
   1.2.2 Consultation of stakeholders ............................................................................ 6
   1.2.3 Main results of the stakeholders' consultation.................................................... 7
2. Problem definition ....................................................................................................... 8
   2.1 Issue or problem that may require action ............................................................... 8
   2.2 Current situation in the Member States ................................................................. 9
   2.2.1 Enforcement of speeding, drink-driving, non-use of seatbelts ......................... 9
   2.2.2 Infringements by non-resident drivers ............................................................ 10
   2.3 Categories affected ............................................................................................... 10
   2.4 Evolution of the problem all things being equal ................................................... 10
   2.4.1 Recommendation of 2003 on enforcement in the field of road safety ............... 11
   2.4.2 Framework Decision on the application of the principle of mutual recognition to
        financial penalties .................................................................................................. 12
   2.4.3 Treaty of Prüm .................................................................................................. 12
   2.4.4 Bilateral agreements ......................................................................................... 13
   2.5 The right for the EU to act .................................................................................... 14
3. Objectives .................................................................................................................. 14
   3.2 General policy objectives - Specific/operational objectives ................................... 14
   3.3 Consistency of these objectives with other EU policies and horizontal objectives ... 15
4. Policy options............................................................................................................. 15
4.1 Possible options for meeting the objectives and tackling the problem ............. 15
4.2 Options which have been discarded at an early stage ................................. 18
5. Analysis of impacts.................................................................................................... 18
5.1 Likely economic, social and environmental impacts of each of the short-listed options .......................................................................................................................................................................................... 18
5.2 Positive and negative impacts, direct and indirect, including those outside the EU. 18
5.2.1 Positive impacts ................................................................................................. 18
5.2.2 Negative impacts .............................................................................................. 19
5.3 Potential obstacles and risks .............................................................................. 20
5.3.1 Technical obstacles .......................................................................................... 20
5.3.2 Political issues ................................................................................................. 20
5.4 Social groups, economic sectors or particular regions affected ....................... 21
6. Comparing the options .......................................................................................... 21
6.1 Qualitative assessment of relevant impacts ......................................................... 21
6.1.1 Policy option 1: Business as usual ................................................................. 22
6.1.2 Policy option 2: Structured best practices, decentralised enforcement ........ 22
6.1.3 Policy option 3: EU wide information exchange system - Enforcement in the country of offence ....................................................................................................................... 22
6.1.4 Policy option 4: Enforcement in the country of residence based on mutual recognition of evidence ....................................................................................................................... 22
6.1.5 Policy option 5: Convergence of enforcement practices and cross-border co-operation ................................................................. 23
6.2 Quantitative assessment of important impacts ................................................... 23
6.2.1 Road safety ...................................................................................................... 23
6.2.2 Administrative costs for public bodies .............................................................. 26
6.2.4 Added value of EU action ............................................................................... 30
6.2.5 Proposed action .............................................................................................. 30
7. Monitoring and Evaluation ................................................................................... 32
7.1 Describing the objectives .................................................................................. 32
7.2 Defining the indicators ...................................................................................... 33
7.3 Overview of objectives and indicators ............................................................... 34
Executive summary

In its 2001 White Paper on European transport policy, the Commission proposed that the European Union sets itself the target of halving the number of road deaths by 2010. This target was subsequently repeated in the European road safety action programme adopted in 2003 and was endorsed by the Council and the European Parliament.

The general objective of the proposal is to improve road safety and contribute to an efficient and sustainable transport system by increasing compliance with traffic regulations and putting an end to the current difference of treatment between resident users and non-resident users.

The impact assessment considers five options, each of which address both cross-border enforcement and good enforcement practices to be applied in the Member States. The first option consists in keeping the current situation unchanged. In the second option, Member States are encouraged by the Commission Recommendation on enforcement in the field of road safety (2004/345/EC) to apply good enforcement practices. In terms of cross-border enforcement, national rules are improved. The third and fourth options are also based on the existing Commission Recommendation, in terms of enforcement methods. In terms of cross-border enforcement, option 3 consists in setting up an EU electronic data exchange network to identify the holder of the vehicle; option 4 is based on mutual recognition of evidence and transmission of the relevant data to the State where the vehicle is registered, for execution of sanctions by these authorities. The fifth option is also based on the transmission of evidence to the State of residence for cross-border enforcement. It differs from options 2, 3 and 4 in that it comprises regulatory measures for the application of good enforcement practices by all Member States. It includes standardisation of enforcement devices.

Analysis of impacts show that measures on cross-border enforcement accompanied by improved methods of enforcement could lead to a reduction of 5000 road deaths per year, which represents a benefit of 5000 billion Euro per year. Regarding costs, about 140 million Euro is needed to upgrade all Member States to an acceptable level of enforcement, with an annual operating budget around 23 million Euro. These costs include producing harmonised standards. Impacts on environment consist in reducing production of CO$_2$, production of ozone and fuel consumption.

The assessment of the options shows that actions are needed on both issues, improved cross-border enforcement and better enforcement practices in the Member States. At the EU level, the Council framework decision on the application of the principle of mutual recognition of financial penalties (2005/214/JHA) could contribute to improving the current situation. However, this instrument only applies to final decisions, whereas the phases between recording of the offence up to the final decision are not covered. Consequently, the proposal, based on option 3, includes appropriate administrative and technical mechanisms for these phases.
1. **PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES**

1.1 **Organisation and timing**

1.1.1 *Reference of the associated item in Agenda Planning or the Work Programme*

2006/TREN/002 – Legislative proposal on road safety enforcement in the European Union

1.1.2 *General chronology of the IA and inter-service steering group*

An inter-service steering group was established in order to define the scope, monitor the progress and supervise the completion of the Impact Assessment reports. It included the following Commission Services: DG ENTR, DIGIT, JLS, SG, TREN (A1), DG TREN (E3), from the early stages of the Impact Assessment.

- Definition of scope and planning: April to June 2006
- 1st meeting of the inter-service steering group: 1 June 2006
- Meeting of Enforcement Expert Group: 20 July 2006
- Impact Assessment carried out by external consultant:
  - Request for services to ECORYS Transport: 13 June 2006
  - Signing of contract: 29 August 2006
  - Final report from ECORYS Transport: 23 December 2006
- Public consultation: from 6 November 2006 to 19 January 2007
- Stakeholders' meeting: 27 February 2007

1.2 **Consultation and expertise**

1.2.1 *External expertise*

An external impact assessment study on road safety enforcement and cross border cooperation has been carried out by ECORYS Transport from 29 August 2006 to 23 December 2006 (*see* Annex III to this Working Document). DG TREN takes full ownership of the report including the elements that were prepared originally by the outside consultant.


Agenda of the external impact assessment study:

- Kick-off meeting: 22 September 2006
- Interim meeting: 17 November 2006
- Final meeting: 15 December 2006
The meetings have been held with the participation of the inter-service steering group.

1.2.2 Consultation of stakeholders

Stakeholders have been consulted from the early stages of the project. In 2004, the project SARTRE 3 (Social Attitude to Road Traffic Risks in Europe), co-funded by the European Commission, asked 24,000 EU citizens on their views on road safety enforcement. Over three-quarters (76%) of all the drivers questioned were ‘in favour’ of more stringent enforcement in road safety, with 35% being ‘strongly in favour’. There is thus a broad recognition that road safety enforcement is seen as a beneficial activity and can help to improve road safety. This is confirmed by a study conducted on the automated enforcement system in France in 2005 which reported that 77% of the drivers think that the automated cameras contributed to improving road safety.

Based on the Commission Recommendation of 21 October 2003 on enforcement in the field of road safety (the "Commission Recommendation"), the Commission set up an expert group to gather and exchange relevant information and discuss implementation of the Recommendation by the Member States. The group consists of experts from the transport police (road safety) area and experts in the field of traffic policing from all Member States, Norway and Switzerland.

A meeting with the expert group was held on 20 July 2006 in order to discuss the objectives and the scope of regulatory action at EU level.

In addition, various bilateral meetings have been held with a number of stakeholders, especially Member States and enforcement authorities.

A public consultation, via the website “Europa” of the Commission, was held from 6 November 2006 to 19 January 2007, according to applicable Commission standards. 54 comments were received from various stakeholders: governments and public authorities, companies and industrial federations, research and studies organisations, users associations, road infrastructure operators and individuals. All comments are published on the Road Safety Site of the “Europa” portal of the Commission.

A stakeholders' meeting was held on 27 February 2007, to which all authors of comments and all Member States were invited.

In addition, the Commission drew up a questionnaire dedicated to the traffic police forces of Europe in order to gather information on road traffic enforcement in Europe. 21 countries answered the questionnaire which was used to carry out a panel discussion to which the traffic police forces were invited to give their comments in view of an EU action. The results are summarised in Annex V to this Working Document.

---

3 See Annex I to this Working Document.
1.2.3 Main results of the stakeholders' consultation

– All participants agreed on the problem definition and intended EU action: increasing road safety through better enforcement, both in substance and in procedural matters;

– 93% of the respondents agree that EU actions should not be limited to the Trans-European Road Network, but should cover all roads in the EU;

– 15% of the respondents favour EU action limited to the three main traffic offences responsible for road accidents (speeding, drink-driving and non-use of seatbelts); 19% of them propose to extend EU actions to some other offences; 26% of them propose an extension of the scope to all other traffic offences; 34% of them propose to initially limit the scope to the three main traffic offences and then progressively extend it to all other offences;

– 15% of the respondents favour a policy restricted to the exchange of relevant information between national authorities based on common standards and a unique electronic system. 20% of the respondents favour a policy based on the principle of mutual recognition of evidence on traffic offences. 33% of the respondents favour a policy including common enforcement methods and actions on all roads in the EU in the field of speeding, drink-driving and wearing of seatbelts as well as the implementation of the principle of mutual recognition of evidence on traffic offences.

These results are summarised in Annex II to this Working Document. They have been taken into account in the following sections presenting the key steps of the impact assessment.

1.3 The Impact Assessment Board

On 8 May 2007, the Impact Assessment Board of the European Commission delivered an opinion regarding a preliminary version of this Impact Assessment report. In the opinion, the Board stated that:

– The report offers quantified assessment of some of the costs and benefits associated with each option, while indicating clearly the assumptions made and the associated uncertainty intervals;

– The report should clearly distinguish between the two different issues it is addressing: improved cross border enforcement and harmonised enforcement standards;

– The report should contain more information on the enforcement standards envisaged;

– The policy options should be further clarified;

– The report should further comment on the scope.

The present version of the Impact Assessment report has been accordingly redrafted with a view to taking these recommendations into account.
2. **Problem Definition**

2.1 **Issue or problem that may require action**

In its 2001 White Paper\(^5\) on European transport policy, the Commission proposed that the European Union sets itself the target of halving the number of road deaths by 2010. This target was subsequently repeated in the European road safety action programme adopted in 2003\(^6\) and was endorsed by the Council\(^7\) and the European Parliament\(^8\).

Encouraging road users to improve their behaviour by complying with basic road safety rules is a crucial element in this strategy. This applies especially to respecting applicable speed and alcohol limits, and wearing seatbelts. These offences are the three main 'killers' on the road. In order to ensure compliance with the law, enforcement and follow-up of offences are necessary. Controls should be systematic, sanctions should be effective and applied to all offenders, not just to residents. The external impact assessment study confirms that speeding, drink-driving and non-use of seatbelts, both in terms of numbers of accidents, as well as the severity of accidents, play a major role in traffic deaths. In the EU 25, speeding has been estimated to be related to 12,400 road deaths, which is nearly 30% of all traffic deaths, and drink-driving to 10,800 deaths, which is 25% of road deaths. Non-use of seatbelts affects the severity of the impact of accidents. It has been estimated to be related to 7,300 road deaths, which is 17% of road deaths. They represent all together more than half of all road deaths.

Today, more than three years after the adoption of the Commission Recommendation, three basic facts have to be noticed:

- The mid-term review of the European Road Safety Action Programme of 22 February 2006\(^9\) showed that progress achieved by 2005 will not allow reaching the objective of 50% reduction, if the current trend continues. The reduction would then only be 40%. In addition, until August 2006, the tendency was favourable but from as of September 2006 the trend has changed. From 2005 to 2006, road deaths have increased in almost all Member States from 2% to 30%\(^10\). This trend is confirmed by lacklustre fatality reduction rates up to June 2007 in most Member States;

- Road safety enforcement varies considerably between Member States, and Member States have also a varying safety record. The risk of death on the roads is nearly five times higher in some Member States than in others;

- Traffic offences committed by non-residents are often not sanctioned, or sanctions are often not executed, as legal and technical instruments to pursue them across borders are lacking or insufficient in the European Union.

---


\(^7\) Conclusions of the Transport Council of 5 June 2003, document 9686/03 (Press 146), p. 22.


\(^10\) CARE (EU road accidents database), 6 November 2007.
2.2 Current situation in the Member States

Two issues have thus to be differentiated, when one looks at the situation in the Member States. First, the enforcement practices in the Member States are being analysed. Second, the issue of non-resident offenders is described.

2.2.1 Enforcement of speeding, drink-driving, non-use of seatbelts

Enforcement varies among Member States. For drink-driving, over the 2001-2003 period of time, while only 4% of drivers have been checked in Italy, 38% were in Finland. For speeding, they were only 9% in Portugal, as compared to 46% in the Netherlands. For seatbelt wearing, enforcement percentages are not available at this stage. Wearing rates vary from 36% to 91% in urban zones.

Enforcement of traffic rules is carried out in different ways in the Member States. The type of enforcement methods being used, as well as the frequency and intensity of their use, differ between them. These various enforcement methods result in considerable differences between Member States in drivers’ perceptions. According to SARTRE 3\(^{11}\), while over one third of all drivers in the UK think they will be checked for speeding, 3% of drivers in Sweden think their speed will be monitored. Regarding drink-driving, over one-quarter of drivers in Slovenia (27%) and less than 1% of drivers in Ireland report that they expect to be checked (\textit{See} Annex IV).

Member States are progressively introducing automatic enforcement devices. Regarding enforcement in relation to speed, almost all Member States use fixed cameras as well as mobile cameras. Also average speed cameras are progressively introduced. Automatic enforcement also takes place in relation to red light running in an increasing number of countries. Regarding seat belt wearing, in some countries, automatic enforcement is combined to other types of offences, such as red light running or speeding\(^{12}\).

Enforcement technologies as well as type-approval procedures vary among Member States. Non standardised devices as well as non harmonised approval methods contribute hindering mutual recognition of enforcement actions and co-operation between Member States.

Sanctions for traffic offences can be either criminal or administrative depending on Member States. In some countries, sanctions are partially criminal partially administrative depending on the level of seriousness of the infringements.

The Commission Recommendation of October 2003 requests that Member States send information to the Commission about the implementation of the Recommendation before end September 2007. So far, only six Member States have sent such information. Therefore, little information is currently available about the relation between the application of good enforcement practices and developments in road safety.

---

11 Institut National de Recherche sur les Transports et leur Sécurité (INRETS) et al. : European Drivers and Road Risk, SARTRE 3 (June 2004).
2.2.2 Infringements by non-resident drivers

As the level of mobility rises, more cars cross borders and the number of non-resident drivers committing road traffic offences increases. While the use of automated equipment is growing, non resident drivers or car owners often cannot be identified and sanctioned due to the lack of appropriate cooperation instruments between enforcement organisations. It follows that the non-resident road users often escape enforcement actions. This group of traffic participants may not be penalised for unwanted and unsafe behaviour. Apart from giving rise to discrimination between EU citizens, which reduces the acceptance of enforcement measures, this also directly reduces the actual and perceived effectiveness of the measures.

At this stage, there is little systematic information available on the share of non-residents in road traffic. For the countries where this information is available, the share of non-resident drivers (in terms of vehicle kilometres) appears to be around 5\%\textsuperscript{13}: it is of 5.5 \% in France (30 billion vehicle-kilometres), 3.9 \% in Germany, 4.1 \% in the Netherlands, and 3.9 \% in the UK.

Also the percentage of offences by non-resident road users is difficult to evaluate. The available data on speeding shows important differences between Member States. Differences are in line with the geographical position of the country (transit country or not), the level of tourism in the country and the type of road section (international or local route). The share of non-resident drivers in speeding offences shows a range of 2.5\% to 30\%: 2.5\% in Denmark, 4\% in Finland, 6\% in the Netherlands, 8\% in Catalonia (Spain), 14\% in Belgium, 15\% in France, and 30\% in Luxembourg.

These figures suggest that non-resident drivers are relatively more involved in speeding offences than resident drivers. Thus, in France, their share in traffic is 5.5\%, but their share in offences 15\%. The corresponding figures in the Netherlands are 4.1\% traffic share, but 6\% share in offences\textsuperscript{14}.

Penalties issued with regard to foreign vehicles have proved to be difficult or impossible to enforce across national borders, because no adequate judicial co-operation processes have been put into place to facilitate the enforcement. The consequences of this problem are substantial: London Transport Council has calculated that the economic cost of non-compliance with civil traffic regulations by foreign registered vehicles is about € 20 million per annum, with the value in uncollectible penalties being a further € 20 million\textsuperscript{15}.

2.3 Categories affected

All private and professional road users will be affected.

2.4 Evolution of the problem all things being equal

Various initiatives have been taken to address these problems: improve enforcement standards in road safety in Member States, and facilitate cross-border co-operation. Several multi-country instruments as well as bilateral agreements providing for a legal framework can be

\textsuperscript{13} Source: Eurostat. The 5\% is based on the evidence from a selected group of countries. It means that of the vehicle-kms made on the roads, some 5\% is made by vehicles registered in another country.

\textsuperscript{14} Confirmed by: Centraal Justitieel Incasso Bureau, the Netherlands.

mentioned. However, as explained below, much of this framework is not binding and thus often not applied. Also these instruments do not provide for the necessary appropriate technical framework for information exchange.

2.4.1. Recommendation of 2003 on enforcement in the field of road safety

The Commission adopted on 21 October 2003 a Recommendation on enforcement in the field of road safety\textsuperscript{16}. This Recommendation deals with the exchange of best practices on enforcement in the field of speeding, drink-driving and seatbelt use, but also with cross-border co-operation.

For the purpose of implementing the Recommendation, an Expert Group on Road Safety Enforcement was set up. Three sub-groups were also set up, each of them dealing with one of the subjects contained in the Recommendation, namely speeding, drink-driving and seatbelt use. Meetings and discussions took place between the Commission and the Member States about best enforcement practices between June 2004 and July 2006. Presentations were given by experts from different Member States on enforcement practices applied by them. Information about best practices enforcement was exchanged.

However, since a Recommendation is not legally binding, it has failed to result in an EU-wide introduction of best enforcement methods. A structured and systematic process all over the EU towards more stringent enforcement has not yet taken place. The practice under the Recommendation did not lead to the cooperation necessary to improve enforcement practices throughout the EU. Indeed, the trends since 2003 show that the gap between Member States with a good enforcement record and those with room for improvement has not closed in a substantial way. The number of people killed per million of inhabitants is many times higher in some Member States than in others (up to nearly 5 times). For instance, in 2005, this number was 46 deaths per million of inhabitants in the Netherlands, 49 in Sweden and 56 in the UK, whereas it was 222 in Lithuania and 150 in Greece. The three good performing countries are known to apply good enforcement practices, whereas the other two do not apply such practices. The low take up of enforcement best practice, compared with the high level of deaths in countries such as Lithuania and Hungary shows that profiles of traffic enforcement are still to be improved.

The variation in enforcement practices between Member States can be seen from the following figures: whereas France carried out 270 million checks for speeding in 2005, this was 23.5 million in Spain and 1.15 million in Poland. With respect to checks on drink-driving, the Netherlands carried out 2 million checks. The number was also 2 million in Spain (which has almost twice the population) and 1 million in Hungary in 2003.

Also, the Recommendation does not provide for an efficient cross border enforcement mechanism. It defines guidelines and objectives, but procedures and formalities are not provided for ensuring that offences are recorded and followed up. Apart from not being a binding instrument, it is limited to serious cross-border offences only and is essentially based on voluntary cooperation.

2.4.2. Framework Decision on the application of the principle of mutual recognition to financial penalties

In 2005, Member States agreed on the Council framework decision on the application of the principle of mutual recognition of financial penalties\(^\text{17}\). This instrument in the field of police and judicial cooperation in criminal matters based on the Treaty on European Union, deals with mutual recognition of final decisions requiring a financial penalty to be paid. It is intended to facilitate the enforcement of financial penalties in a Member State other than the State in which the penalties are imposed. The deadline for its implementation by the Member States was 22 March 2007.

The Framework Decision allows a competent authority to send, for execution, a financial penalty issued against a natural or legal person to a member State where the person has property, income or is normally resident (or registered). Execution of the decision will occur without further formality unless one of the grounds for non-recognition is invoked.

A financial penalty in the context of the Framework Decision must be a final decision taken by either a judicial or administrative authority, provided there has been the possibility of appeal to a court having jurisdiction in particular in criminal matters. It covers both criminal offences and infringements of law. A list of offences, including infringements of road traffic regulations, has been drawn up for which the dual criminality rule does not apply.

Considering its contents, the Framework Decision could contribute to some extent to improving the current situation of cross-border enforcement in the field of road traffic.

However, this instrument only applies to final decisions, whereas the phases between recording of the offence up to the final decision are not covered. In these phases, specific regulatory means are needed to achieve efficient practical co-operation between enforcement authorities in the field of traffic offences.

2.4.3. Treaty of Prüm

The Treaty of Prüm, signed on 27 May 2005 by Austria, Belgium, Germany, Spain, France, Luxembourg and the Netherlands, deals with cross-border co-operation and allows among others mutual access to national vehicle registration data, via designated contact points. It is restricted to data exchange for criminality, terrorism and limited to criminal offences. It focuses particularly on combating terrorism, cross-border crime and illegal immigration. The Treaty will enter into force upon ratification by the signatories. Up to date, it entered into force in seven Member States: Austria, Belgium, Finland, Germany, Luxembourg, Slovenia and Spain.

Meanwhile, JHA Council at its meeting of 12-13 June 2007 reached political agreement on a legislative initiative submitted by Germany and fourteen other Member States\(^\text{18}\) consisting of a Council Decision on stepping up cross-border co-operation, particularly in combating terrorism and cross-border crime\(^\text{19}\). This Council Decision transposes most of the non-Schengen related third pillar provisions of the Prüm Treaty, including those concerning the exchange of vehicle registration information, into the EU legal order and thereby extends

\(^{17}\) Council Framework Decision 2005/214/JHA of 24 February 2005 etc.

\(^{18}\) DE, BE, ES, FR, LU, NL, AT, SI, IT, FI, PT, UK and SE.

\(^{19}\) Council Document 10232/07 REV1 LIMITE CRIMORG 104 ENFOPOL 109.
these provisions to 27 Member States, taking on board Parliamentary reservations of CZ, DK, FR, IE, NL, PL, SE and UK. The formal adoption of the legal instrument will follow in the beginning of the year 2008.

Germany submitted an initiative with regard to a Council Decision on the implementation of the "Prüm Decision" on 25 June 2007 on which a common approach was achieved by an annex and a manual containing technical and administrative details to be laid down by all Member States. The technical annex is discussed in a "Friends of the Presidency Group" especially established for this purpose by the Portuguese Presidency.

The German legislative initiative foresees for automated searching of vehicle registration data the use of a special version of the European Vehicle and Driving Licence Information System (EUCARIS) software application, and amended versions hereof. This software application was already delivered to the Prüm signatories.

Some concerns were raised about the costs of implementation, as the chosen option is based on the development and implementation of a data exchange system by the intergovernmental system “EUCARIS” on payment of fees by the Member States (development costs: about 15,000 € by Member State; annual fees depend on each Member State need). Moreover, adaptations are needed between the signatories to allow exchanges of an increased volume of data needed for traffic enforcement. Evaluation of these additional volumes of data has not been carried out yet. The information system "EUCARIS" is currently subject to an independent evaluation requested by the European Commission, with a view to finding out whether the system, hitherto not subject to independent assessment, can provide the needed architecture for data exchange in road safety between 27 Member States.

Decisions are to be taken in Member States on the applicability of the Treaty of Prüm to road traffic offences. Some countries see the Prüm provisions only be applied to terrorism, cross-border crime and illegal immigration. In France, a preliminary decision confirmed this interpretation. Therefore, it is fair to assume that covering road traffic offences via the Treaty will not go uncontested.

2.4.4. Bilateral agreements

The implementation procedure of bilateral agreements on co-operation in the follow-up of road safety offences is often partial and problematic. Legally, most bilateral agreements, such as the Dutch-German or the French-Luxemburg agreements, do not provide for measures to follow-up on offences committed by non-residents when they leave the country, where the offence was registered without having paid the fine.

In addition, the adoption procedure is usually lengthy, based on ratification by national Parliaments, postponing their implementation such as the French-German agreement, which has been signed in March 2006.

Moreover, bilateral agreements result in discrimination against non-residents drivers who are not subject to such agreements.

---

20 The decision was proposed by the concerned section of the “Conseil d’Etat” on 1 March 2007 following the interdepartemental meeting (Sécrétariat Général du Gouvernement) on 27 February 2007 and will be examined by the plenary session.
On the technical level, as no common standards have been established, each agreement sets up a specific system, based on specific approaches and technologies. A case in point is the bilateral agreement between Germany and Austria on cross-border enforcement. It does not work because both countries apply different systems. For Germany, the driver is liable and therefore has to be identified by means of a picture, whereas in Austria a picture of the number plate suffices since there the car owner has to pay the fine. The equipment used in one country does not fit with the system applied in the other country, and the countries involved have not been able to agree on mutual recognition\textsuperscript{21}.

The difficulties to implement bilateral or multi-country agreements have been reflected, during the public consultation, by Member States supporting improvement on cross-border actions.

2.5 The right for the EU to act

– Article 71 EC Treaty

The legal basis for taking measures at EU level in the field of road safety is Article 71(1), which states that the "... the Council shall, acting in accordance with the procedure referred to in Article 251 …., "(c) lay down measures to improve transport safety."

To achieve similar results all over the EU, the Commission proposes a legally binding instrument in this field, in accordance with the commitments it made, when it issued the Recommendation. By proposing the application of enforcement measures, rather than harmonising rules and sanctions, the proposal respects both the subsidiarity and the proportionality principle: EU-wide application of adequate enforcement measures, coupled with instruments of cross-border co-operation, is necessary for achieving the objective, but the proposal does not envisage to harmonise national traffic rules (e.g. maximum speed limits), neither national sanctions or penalties.

3. Objectives

3.2 General policy objectives - Specific/operational objectives

The general objective of the proposal is to improve road safety within the Community, thereby contributing to an efficient, sustainable and reliable transport system.

The specific objective of Community action is to improve road behaviour by increasing compliance with traffic regulations (speeding, drink-driving and non-using seat belts) by both resident (national) and non-resident (cross-border) users on the basis of improved enforcement.

It is necessary that enforcement practices are carried out in a similar way in all Member States. This will ensure the necessary trust and confidence between the various authorities throughout the Union, when they have to recognise penalties imposed abroad. Therefore, the study also features broad convergence goals for the quality of enforcement in road safety.

\textsuperscript{21} Vertrag zwischen der Bundesrepublik Deutschland und der Republik Österreich über Amts- und Rechtshilfe in Verwaltungssachen (31 May 1988).
3.3 Consistency of these objectives with other EU policies and horizontal objectives

The Mid-term review of the White Paper on European Transport Policy of 2001 showed that the overall objective of the policy in the field of road safety, namely reducing the number of road deaths with 50% in 2010, will not be achieved without further action at EU level. If the current trend continues, the reduction will only be 40%.

Better enforcement would greatly contribute to the target of reducing the fatalities on European roads by 50% by 2010. As shown by different experiments conducted in France, Sweden, Finland, the Netherlands and the UK\footnote{Cohen/Duval/Lassarre/Orfeuille, Limitations de vitesses : les décisions publiques et leurs effets, (1998), p. 129; Elvik/Vaa, The handbook of road safety measures (2004).}, the increased risk of being sanctioned after committing a traffic offence has considerable impact on behaviour.

Applying adequate enforcement measures is known to be the most effective instrument for saving as many lives as possible in a short time. In France, in the period from 2002 to 2005, the reduction of road deaths was 30% as the level of enforcement increased considerably. This resulted in a reduction of 7,200 fatalities\footnote{Observatoire national interministériel de sécurité routière, ministère des transports : Impact du contrôle sanction automatisé sur la sécurité routière (2003-2005) (March 2006).}.

The proposed action is in line with the policy of the EU in the fields of human health and environment. Improved enforcement would contribute to combating alcohol-related harm and to public health policy. In its 2006 Communication on an EU strategy to support Member States in reducing alcohol related harm\footnote{See Communication from the Commission to the Council, the European Parliament, The European Economic and Social Committee of the Regions - COM(2006) 625: An EU strategy to support Member States in reducing alcohol related harm.}, the Commission identified alcohol-related road accidents as one out of five priority themes. The proposed action is also in line with the policy of the EU on criminal sanctions (cf. in particular the Council Framework Decision 2005/214/JHA on mutual recognition of financial penalties).

4. Policy options

4.1 Possible options for meeting the objectives and tackling the problem

Taking into account existing measures and instruments in the Member States, the five following options for Community action on enforcement could be considered.

**Option 1: Business as usual**

One option is to leave everything as it is. Each Member State applies enforcement measures and implements enforcement actions according to its own legislation.

The EU Recommendation of 2003 provides the competent authorities with guidelines to improve enforcement practices. Police forces use the available equipment. Foreign offenders are to be prosecuted by the competent authorities of the countries where the offences have been committed, under national legislation.
Cross-border enforcement is only applied as far as it is subject to bilateral agreements. In a few countries, such agreements allow for some follow-up of offences committed by non-residents, based on the exchange of information between authorities in charge of national registration databases. Best practices are exchanged between Member States on the basis of the Recommendation of 2003. There is no special implementation mechanism; implementation of the recommended measures relies on existing technical conditions, national legislation and often personal motivation of police forces. Differences between the Member States in terms of quality and quantity of enforcement actions and results may not be reduced. The unequal treatment of EU citizens remains.

The community action would be limited to support implementation of Recommendation of 2003.

This option does not include any legislative action.

**Option 2. : Structured best practices, decentralised enforcement**

Option 2 is based on a more structured exchange of best practices on enforcement and improved cross-border enforcement among Member States.

Based on the Recommendation of 2003, exchanges of best practices between the Member States are structured at the EU level, through collection and analysis of data and statistics, reports and meetings, dissemination of information and tools, organised by the European Commission.

Non-resident offenders are prosecuted by the competent authorities of the country where the offence has been committed according to this country's legislation. When the vehicle, with which an offence has been committed, is not stopped by the police forces, the number plates are recorded. Enforcement officers shall be provided with information on the recorded vehicles. Sanctions will be enforced when the recorded vehicles are stopped and checked by the enforcement units on return to the country, where offences have been committed.

Legislative actions in option 2 consist in adapting national legislations to allow the competent authorities in each Member State to sanction offenders on their return to the country where the original offence was recorded.

**Option 3. : EU wide information exchange system - Enforcement in the country of offence**

This option would include the structured exchange of best practices, as explained in option 2. With regards to offences committed by drivers of vehicles registered in another Member State, an information exchange system, to which all relevant national authorities are connected, is established at EU level to identify the car owners. The legal prosecution of traffic offenders is carried out by the state where the offence has been committed.

Penalty notifications are sent by the competent authorities of this Member State to the car owner in his/her language. Sanctions are executed also in the country where the offence has been committed, under this country's national legislation.

The legislative action consists in a directive for setting up an information exchange system and appropriate cross-border cooperation between competent authorities to identify non-resident holders of vehicles who have committed an offence.
Option 4. : Cross-border enforcement based on mutual recognition of evidence

The legal prosecution of traffic offenders is carried out by the state where the vehicle, with which the offence has been committed, is registered.

Over and above the practices described under option 3, evidence on road traffic offences is, where necessary\textsuperscript{25}, transferred to the competent authorities for prosecution and execution of sanctions in the residence state.

Sanctions are imposed and executed by the competent authorities in the country, where the offender is normally resident. This measure would be based on the principle of recognition of the evidence established by enforcement officers in the Member State of offence, which means regulating the admissibility of evidence and transferring it to the resident state. The evidence to be recognized would be evidence provided by the enforcement equipment. As a result, new technical type approval measures concerning such equipment are needed at EU level. It is important to realise that such a mechanism is not covered by the Framework Decision on mutual recognition of financial penalties. This Framework Decision only concerns final decisions, and moreover leaves to the discretion of each Member State the execution of fines of less than 70 €. However, as under the Framework Decision, the measure proposed also assumes mutual recognition of penalties between the Member States.

The legislative action consists in a directive on enforcement, prosecution and executing sanctions of offenders in their country of residence, and rules on type approval.

Option 5. : Convergence of enforcement practices and cross-border co-operation

In this option, the cross-border co-operation as provided for in option 4 is combined with convergence requirements for the quality of enforcement practices.

Enforcement methods and measures implemented by Member States are required to meet certain convergence standards established by a regulatory framework. A model could be the Directive 2006/22 on professional transport\textsuperscript{26}. Intensity of controls could be defined through minimum and maximum levels, providing the Member States the opportunity to adapt them to national contexts. Alternatively, the Directive could refer to comitology procedures for elaborating concrete standards which could be adapted over time.

Building on such convergence of enforcement practices and the subsequent exchange of information, notification letters could be issued and sent by the competent authorities of the residence country. Sanctions are executed by the competent authorities in the country where the offender is normally resident. Such a system is not applied at present.

The legislative action is a directive on enforcement methods and cross-border enforcement in the country of residence.

\textsuperscript{25} This will be necessary if these administrative and judicial enforcement decisions have not yet resulted in execution of the sanction.

\textsuperscript{26} Directive 2006/22/EC concerning social legislation relating to road transport activities – Article 2 prescribes that "each Member State shall organise checks in such a way that, as from 1 May 2006, 1% of days worked by drivers of vehicles falling within the scope of Regulations (EEC) No 3820/85 are checked. This percentage will increase to at least 2% from January 2008 and to at least 3% from 1 January 2010".
4.2 Options which have been discarded at an early stage

No option has been discarded. All options were looked at in the Impact Assessment.

5. Analysis of Impacts

5.1 Likely economic, social and environmental impacts of each of the short-listed options

The analysis includes assessment of economic, social and environmental impacts, according to the Impact Assessment Guidelines. It addresses both impacts resulting from better enforcement practices in the Member States and improve co-operation concerning cross-border enforcement.

5.2 Positive and negative impacts, direct and indirect, including those outside the EU.

5.2.1 Positive impacts

The following positive impacts can be noted:

The main positive impacts are expected on safety of road users. Better enforcement will lead to a decrease in the number of traffic offences, leading to respecting the traffic rules and to reducing accidents and fatalities. The impact assessment conducted by the Commission to analyse the health, social, economic and environmental problems related to alcohol, based on the World Health Organization CHOICE model, estimated that enforcement of drink-driving laws via unrestricted breath testing would reduce fatalities by 6 – 10%.

- Automation of the process is expected to lead to important reduction in use of administrative resources. In France, an evaluation estimated that the 5 million penalties issued in 2005 by the automated enforcement system would have required 6.500 additional police officers under the old system.

- Better enforcement has potential positive impacts in the professional transport sector. As traffic offences in the non resident countries will be followed up and will therefore more often lead to payment of penalties, truck and bus drivers will be more likely to comply with all traffic rules and regulations. As respecting the traffic rules has a positive impact on traffic fluency, this will result in less time pressure for the professional drivers.

- Besides less time pressure for truck and bus drivers, an indirect positive impact for professional transport can be expected regarding the physical damage in accidents and the time lost due to congestion. Moreover, drivers tend to overestimate the time gained by an increase of speed. Studies on traffic and speed show that optimal traffic volumes are reached with an average speed of 60-70 km/h on urban motorways.

- Job quality and safety of enforcement officers and staff is expected to be improved through more efficient methods and use of technological innovations and electronic equipment.

28 Rapport de la mission d'évaluation du dispositif de contrôle sanction automatisé en France (July 2005).
− Indirect positive impacts are also expected on road workers safety. Every year many workers are injured or killed in traffic accidents. They represent about 2% of the total number of road fatalities in the EU. An increase in enforcement of speeding at road construction works is thus likely to decrease the number of accidents and road fatalities near work zones.

− An indirect effect of improved enforcement will be a lower congestion due to accidents. As vehicles use more energy at very low speeds, energy consumption goes up with congestion. Fewer accidents will therefore lead to less energy consumption. Also, at higher speeds, energy consumption of most vehicles increases per kilometre travelled. Thus, if more speeding enforcement results in less speeding, the indirect effect of improved enforcement could well be a reduction in energy consumption.

− Impact of speed on environment:

− Impact on production of exhaust fumes (carbon monoxide (CO2), hydrocarbon, nitrogen monoxide, particles): pollutant productions are optimised at a constant speed of 40 to 90 km/h for individual vehicles and at a constant speed of 50 to 70 km/h for trucks and buses.

− Impact on fuel consumption: speeding increases fuel consumption in regular traffic. Fuel consumption is about 23% lower at a constant speed of 90 to 110 km/h.

− Impact on ozone: ozone is not directly produced by motor vehicles. They produce a high proportion of hydrocarbon and nitrogen monoxide which result in complex chemical reactions and consequently produce ozone in the atmosphere.

− Impact of speed on noise:

− There are two sources of noise: the engine and the interaction between tyres and road surface. The latter is the most important, from 20 to 40 km/h for individual vehicles, and from 30 to 60 km/h for trucks. It increases when speeding, about 12 dB(A) each time speed is doubled.

5.2.2 Negative impacts

The negative impacts are mainly related to additional costs for public authorities. Increased enforcement and cross-border cooperation could lead to additional costs for enforcing organisations within the Member States. These consist of four main elements: administrative costs for cross-border prosecutions, costs for setting up data exchange system, costs for increased enforcement and costs for public campaigns on enforcement.

A cost benefit analysis has been carried out in Flanders, based on a time span of 10 years and a decrease of 14% and 27% in, respectively, the number of road accidents and the number of

31 La gestion de la vitesse, OCDE-CEMT, 2007.
injury accidents. Based on these conditions, which are considered to be average effects, speed and traffic light cameras lead to a return of 29.7 times the costs over a period of 10 years\textsuperscript{33}.

However, the overall benefit-cost ratio is very favourable. In France, the economic benefits from saving lives and reducing injuries have been estimated at €1.4 to €2.1 billion. In 2005, the automated enforcement system in France gave rise to insurance estimates of €280 to €425 million against an amount of fines of €200 to €250 million and a cost of maintaining the system of €100 million\textsuperscript{34}.

5.3 Potential obstacles and risks

Apart from the possible positive and negative impacts of the different policy options, there might also be risks involved. In theory, various types of risks can be discerned, such as technical, operational, commercial and political risks. Negative economic impacts are not expected. Some obstacles and risks can be expected in technical and political areas.

5.3.1 Technical obstacles

Technical and operational risks can be expected regarding implementation of data systems for exchange of information, in the context of co-operation in cross-border enforcement. However, such risks are limited, as use can be made of existing technology and information system architecture (such as the TESTA\textsuperscript{35} network supporting the TACHONET\textsuperscript{36} and the RESPER system\textsuperscript{37}). In addition, every Member State has a specific system and may be reluctant to implement new standards.

Also data protection needs to be addressed, with a view of ensuring that personal data are protected.

5.3.2 Political issues

Not all Member States may necessarily be in favour of changing their safety policies towards converging enforcement practices and cross-border cooperation within the framework of an EU instrument covering 27 Member States. They may wish to target their co-operation bilaterally or within the framework of the Third Pillar of the EU Treaty.

\textsuperscript{33} B. De Brabander, De maatschappelijke efficiëntie van onbemande camera’s - Kosten-batenanalyse voor gewestwegen met snelheidsbeperking van 90 km/u, Universiteit Hasselt (Belgium), rapportnummer RA-2007-112.
\textsuperscript{34} Rapport de la mission d'évaluation du dispositif de contrôle sanction automatisé en France (July 2005).
\textsuperscript{35} TESTA "Trans-European Services for Telematics between Administrations" is a network not connected to the public Internet, that provides a controlled Europe-wide communication environment for public administrations such as the National Networks of EU Member States, EU Institutions and EU Agencies. TESTA is financed under the IDABC programme and managed by the EU Commission; it has security accreditation to the level of "RESTREINT UE".
\textsuperscript{36} A data exchange network ensuring a reliable and secure exchange of the necessary and sufficient data among Member States that issue tachograph cards to help them fulfilling the requirements of Regulation (EEC) No 3821/85 as last amended.
\textsuperscript{37} RESPER (Réseau Permis de Conduire) is an interoperable data exchange network aiming at ensuring a reliable and secure exchange of driving license data between the driving license authorities of the Member States, in order to fight fraud and ensure the correct application of Directive 2006/126/EC.
5.4 Social groups, economic sectors or particular regions affected

All road users (private and professional) will be affected. Regarding economic sectors, industrial companies involved in enforcement equipment and devices, such as cameras, radars, video equipment, data recording devices will be affected. Also, data processing and telecommunication sectors will be concerned.

Countries and regions will be affected depending on their current level of enforcement and the share of non resident offenders in their traffic.

6. Comparing the options

6.1 Qualitative assessment of relevant impacts

The following table gives qualitative scores for the five policy options on the main impacts. In some cases such scores can be quantitatively assessed. Others need to be in qualitative terms as the underlying information is insufficient to quantify them.

Table 1: Identification of impacts per policy option

Source: Ecorys I.A. Study (2006)

<table>
<thead>
<tr>
<th>IMPACTS</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td></td>
</tr>
<tr>
<td>Competitiveness, trade, investments etc.</td>
<td>No change</td>
</tr>
<tr>
<td>Internal market, unfair competition</td>
<td>No change</td>
</tr>
<tr>
<td>Operating costs, conduct of business</td>
<td>No change</td>
</tr>
<tr>
<td>Consumer protection</td>
<td>No change</td>
</tr>
<tr>
<td>Effects on regions and sectors</td>
<td>No change</td>
</tr>
<tr>
<td>Administrative costs public authorities</td>
<td>No change</td>
</tr>
<tr>
<td>SOCIAL</td>
<td></td>
</tr>
<tr>
<td>Standards and rights job quality</td>
<td>No change</td>
</tr>
<tr>
<td>Public health and safety (drivers, workers)</td>
<td>No change</td>
</tr>
<tr>
<td>Crime</td>
<td>No change</td>
</tr>
<tr>
<td>ENVIRONMENTAL</td>
<td></td>
</tr>
<tr>
<td>Air quality/ climate/energy/ environmental risks</td>
<td>No change</td>
</tr>
</tbody>
</table>
### Policy option 1: Business as usual

If no further action is taken at Community level to improve enforcement practice and cross-border enforcement, the practices between countries are likely to diverge further. In particular in the field of cross-border enforcement, some countries may go much faster/further than others. This will increase differences in enforcement levels. Speeding and accident levels may not be reduced further and may even increase, resulting in higher levels of road deaths and fuel consumption due to congestion.

### Policy option 2: Structured best practices, decentralised enforcement

As compared to business-as-usual the decentralised enforcement option may have some effect on non-resident traffic behaviour. The danger of non-resident impunity is lowered. However, without a Europe-wide information exchange system and mutual recognition of evidence, only non-resident drivers, who return to the country, where they have committed an offence previously, are sanctioned.

### Policy option 3: EU wide information exchange system - Enforcement in the country of offence

The follow-up of non-resident offenders will be easier. The time between offence and penalty notification may be shorter and behaviour could thus be positively affected. The effect of this option depends very much, though, on the execution of the penalty by the country of residence. If such execution is limited (e.g. only on the basis of court convictions, or for certain types of offences only), the ultimate effect on behaviour is also likely to be limited to the group of non-residents. Discrimination on the basis of nationality would disappear, as all non-residents are treated in the same way. However, non-residents would still be treated differently from residents.

Option 3 has a strong impact on reducing impunity: all offences committed by non-resident drivers are followed up. Such systems have proved to act as a deterrent in countries where they have been implemented, such as the Netherlands and France. However, its efficiency depends on the execution of the sanctions.

### Policy option 4: Enforcement in the country of residence based on mutual recognition of evidence

The optimal situation in terms of cross-border cooperation would be a centralised system based on mutual recognition of evidence and penalties (financial as well as other), and execution of the penalties by the country of residence. This would substantially increase the level of execution and thereby affect the behaviour of non-residents. As this relates to 2.5-30% of the traffic, the impact on road safety can be substantial. Moreover, discriminatory
treatment of residents and non-residents would disappear. Option 4 also includes measures on type-approval of enforcement equipment, based on applicable EU legislation. This option will contribute to creating an internal market for such equipment.

6.1.5 Policy option 5: Convergence of enforcement practices and cross-border co-operation

This option encompasses policy option 4. It adds action on improving the level of enforcement in the Member States. As this option not only affects behaviour of non-residential drivers, but also the behaviour of residential drivers, the impact on safety can be expected to be much higher. The costs of enforcement would go up, though.

6.2 Quantitative assessment of important impacts

The most important quantitative impacts are the expected impacts on road safety and the administrative costs for the public authorities. These impacts have been quantified as much as possible in the Impact Assessment. The impacts of policy options were assessed against the business-as-usual scenario (option 1).

6.2.1 Road safety

In order to quantify the safety effect, the related road deaths have been first determined. The potential reduction in road deaths for each policy option has then been analysed. This is the percentage reduction in road deaths the policy option is expected to realise. Combination of the related road deaths with the potential reduction gives an estimate for the road safety effects.

– Step 1: Related road deaths

In order to determine the road safety effect, it is necessary to estimate the related road deaths of each of the policy options. The policy options 2, 3 and 4 aim at decreasing the traffic offences committed by non-residents. Because presently only speeding is subject to automated enforcement, this is at the moment the main focus. This may change in the future, however, when cameras are increasingly used to detect also other offences such as non-use of seatbelts. Policy option 5 aims at increasing the total level of enforcement related to each of the three main problem areas (speeding, drink-driving and non-use of seatbelts) for both resident and non-resident drivers.

The percentage of speeding-related road deaths caused by resident and non-resident drivers can be estimated at approximately 3% of road deaths for non residents and 97% for residents. Statistics from insurance companies show that the share of non-resident vehicles in vehicles involved in accidents lies between 1% and 5% (with 3% as an EU-average). For the purpose of this Impact Assessment, it is assumed that the percentage of speeding related road deaths caused by non-resident is of similar magnitude.

The road fatality potential to be reduced for policy options 2, 3 and 4 is in the range of about 400 road deaths. For option 5, it is on the range of 25,000 road deaths, taking into account that there is an overlap in the causation of fatalities by speeding, drink-driving and non-use of seat belts.

– Step 2: Potential reduction
As a next step the potential reduction in road fatalities has been assessed. In other words, to what extent are drivers expected to change their behaviour and comply with traffic regulations and what does this mean for the number of road deaths?

– **Policy option 2: Structured best practices, decentralised enforcement**

This type of cooperation may have some effect on the behaviour of non-resident drivers, compared to the business-as-usual option. However, the effect is expected to be rather small, since the follow-up is carried out by the country of offence. Only when sanctions are applied, the country of residence may take action. It is thus assumed that the impact of this option on traffic behaviour of non-resident drivers is low. The number of speeding infringements may be reduced by a small percentage. The external study conducted estimated this percentage around 5% for the EU.

– **Policy option 3: EU wide information exchange system - enforcement in the country of offence**

In this case, direct access to national databases decreases the follow-up time, as the cooperation of the country of residence in providing information is expected. The time between offence and penalty notification could be shortened and consequently behaviour is more likely to be affected. However, besides the time between offence and penalty notification, the actual follow-up of the penalty is crucial for realising a behavioural change. This is dependent on the actions the country of residence undertakes in the follow-up of the sanctions; like in option 1 the countries may, or may not take action. The impact on road deaths inflicted by non-residents will thus be higher than in option 2, but not very much so. The external study conducted estimated this percentage around 25% for the EU.

– **Policy option 4: Enforcement in the country of residence based on mutual recognition of evidence**

In this case the follow up is carried out by the country of residence, instead of the authorities of the country in which the offence took place. This is likely to have a strong impact on the behaviour of non-residents, since the follow-up will be executed more strictly. This might lead to a substantial decrease in the number of speeding offences of non-residents, which will result in a reduction of the number of speeding related road deaths caused. The external study conducted estimated this percentage around 60% for the EU.

– **Policy option 5: Convergence of enforcement practices and cross-border cooperation**

Apart from including the impacts of policy 4, this policy option increases the overall level of enforcement, for offences both by resident drivers and by non-resident drivers.

The effectiveness of this higher level of enforcement differs by Member State as it depends on the current level of enforcement and the possible increase. ESCAPE38 (2003) concluded that increases in the current enforcement levels of over 3–5 times are needed before safety gains

38 "Traffic enforcement in Europe: effects, measures, needs and future", Project co-financed by the European Commission.
can be maintained throughout time. In an ESCAPE working paper\textsuperscript{39} (Elvik, 2001) a meta-
analysis of 26 evaluation studies on the enforcement of drink driving is presented. This 
analysis shows that an increase in enforcement by a factor 2 would yield 20\% of the 
theoretically possible maximum (complete target group). An increase with a factor 3 would 
yield 30\% and a factor 6 would yield 45\%. Based on these figures for drink driving the total 
effect of increased enforcement may be assessed at a reduction in related road deaths of 20\%.

The potential reduction of all policy options can be influenced by campaigns. Research shows 
that the most important element in the effectiveness of enforcement is information, as this 
influences the subjective anticipation of the offender being caught caused by enforcement\textsuperscript{40}.

- Step 3: Road safety effect

The impact on the number of road deaths of each of the policy options is determined by the 
related road deaths combined with the potential reduction of road deaths. A reduction in road 
Deaths can be expressed in monetary terms\textsuperscript{41}. In that case costs like material damage, medical 
costs, loss of production, congestion costs, and immaterial costs can be taken into account.

Since it is not practical to calculate all these costs for every accident, the total socio-economic 
costs of traffic accidents are divided by the annual number of traffic fatalities, assuming a 
constant ratio between accident with deaths, injuries and material damage.

This computation method was introduced in 1997 by the European Commission in order to 
select cost-effective measures. Based on 1990 figures for all Member States the total costs per 
fatality turned out to be 1 Million Ecu. This value per fatality of course varies by country, 
since the share of fatal accidents and the total socio-economic costs of traffic accidents vary. 
However in calculation on a European scale, this average value can be used. This leads to the 
results in the following table.

Table 2: Determining safety effect (annual effect)

Source: Ecorys I.A. Study (2006)

\textsuperscript{39} R. Elvik: Cost-Benefit analysis of police enforcement, Working paper, ESCAPE project (2001) – see 
footnote 41.

\textsuperscript{40} F. Wegman and Ch. Goldenbeld: Speed management: enforcement and new technologies (2006).

\textsuperscript{41} A reduction in either the number of accidents or the severity of accidents will result in lower direct as 
well as indirect costs.
The present value of these annual savings is estimated to be around 20 times the annual level. In other words, the present value of policy option 2 would be around 360-400 million Euros, of policy option 4 some 4.2-4.8 billion Euros, while policy option 5 may result in a benefit in present value terms of 100 billion Euros.

6.2.2. Administrative costs for public bodies

In order to reach the benefits described above, enforcement bodies have to incur costs. These costs depend on the type of system used for exchange of information on the name and address of vehicle owners in policy options 2 to 5, as well as the number of persons needed for the communication and/or enforcement.

– **Policy option 2: Structured best practices, decentralised enforcement**

In policy option 2 the exchange of information on non-resident traffic offenders between countries is by means of bilateral, non-automatic communication. The country of offence sends a request to the country of residence of the offender and gets a manual reply. This exchange does not require changes in the software systems of both countries, but is likely to lead to a need for more enforcement officers, for both communication and effective follow-up.

In addition, there is a need for additional officers to follow-up on the offence. It is difficult to assess the number of persons required, but the data on the Netherlands could give an idea. The organisation dealing with follow up of offences (CJIB) employs 900 persons, who also deal with other financial penalties. Some 6% of offences are committed by foreigners, implying that around 20-30 persons are dealing with traffic offences by non-residents. As the level of registration of offences is quite high in the Netherlands, and higher than in most other EU states, the total additional number for EU27 is likely to be at lower levels per country. Thus, some 150-200 additional officers may be needed for this follow up.

– **Policy option 3: EU wide information exchange system - enforcement in the country of offence**
In policy option 3, the exchange of information is performed by linking national databases. Searches for information can be made directly in the databases of countries concerned. Such a system will most likely require adjustments of national vehicle database systems to allow searches. Furthermore, an interface will be needed to link the fixed data fields. It is expected that this will involve adjustments of 27 individual databases. The costs of such adjustments will depend on the type of information to be exchanged and the adjustments necessary.

Assuming that all national car registers are already in electronic form, the additional administrative costs of this option relate to setting up the fixed format communication system. This could be done at relatively low costs, as the system should be similar for all countries. Moreover, it is anticipated that changes are needed on the existing electronic databases.

The costs of this option are difficult to estimate, as the scope of work can only be described in broad terms, and few examples are available. However, recently a system has been developed to exchange information between Member States on tachographs (TACHOnet). The system functions as a data exchange vehicle between national databases, using the TESTA system of the Community. The development costs of this system have been assessed to be 0.2-0.3 million. As also interfaces are needed for the exchange, this may also involve some costs for Member States, which may be of similar magnitude. The total costs for the EU of this option are thus globally assessed at € 5-10 million.

In addition, the offences abroad need to be followed up by enforcement officers. For this the same reasoning can be taken as in policy option 2, although fewer people may be needed for communication. In this case some 120 to 160 officers are expected to be additionally required for EU27, at an annual cost of € 5 to 6.5 million.

- **Policy option 4: Enforcement in the country of residence based on mutual recognition of evidence**

In policy option 4 the same system of data exchange is used as in policy option 3. Thus the investment costs are similar at some € 5-10 million. As, however, in this case countries need to follow up on offences made abroad by their residents, through enforcement officers (120-160 officers for EU27, as in option 3).

- **Policy option 5: Convergence of enforcement practices and cross-border co-operation**

On top of the costs described in policy option 4, substantial additional enforcement costs need to be incurred to achieve the described convergence standards on enforcement in policy option 5. These will in particular be related to the Member States that presently have lower levels of enforcement. These Member States will need to invest in equipment and will need additional personnel to enforce the traffic rules.

Some tentative estimates can be made to assess such costs. Taking the fatality rate and the status of automated equipment as basis, it may be assumed that half of the Member States need to make additional efforts to reach the minimum standards. These countries need to invest in equipment (estimated at an average 500 devices at a cost of about € 20,000 per device) and in additional personnel (about 30 enforcement officers, at total salary and overhead costs of € 40,000 per officer per annum).

Investment by each Member State depends on their current enforcement standard. In 2004, for instance, 35 % of the population was checked for drink-driving in Finland, 18% in Greece and...
Sweden and 2 to 4% in the UK and Austria. Regarding speeding, while there were 3 speed cameras in the Czech Republic and in Slovenia, there were 100 in Austria and in Italy and 1200 in the Netherlands and in 2000 in Germany. Countries which have low levels of enforcement will need to make corresponding additional investment for improving road safety enforcement practices.

The additional administrative costs for policy option 5 could be an investment of €10 million (excluding the costs of the database system) and annual costs of €1.2 million per Member State. For the EU as a total, the investment costs could thus be around €140 million (for thirteen countries and the central database system), including data exchange investment and investment on equipment, with annual costs of €16 million.

Studies show that the operating costs of automated enforcement are considerably lower than those of traditional enforcement. For instance, according to the VERA project, automated enforcement operating costs in Finland have been estimated at 15% to 20% of costs of non-automated enforcement42.

Table 3: Investments and annual administrative costs of policy options (in million Euro)

Source: Ecorys I.A. Study (2006)

<table>
<thead>
<tr>
<th>Policy Option Description</th>
<th>Data Exchange (Investment)</th>
<th>Investment in Equipment</th>
<th>Annual Enforcement Costs</th>
<th>Total Costs (Investment + Annual Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Structured best practices, decentralised enforcement</td>
<td></td>
<td></td>
<td>6 - 8</td>
<td>6 - 8</td>
</tr>
<tr>
<td>3. EU wide information exchange system - enforcement in the country of offence</td>
<td>5 - 10</td>
<td></td>
<td>5 - 6.5</td>
<td>10 - 16.5</td>
</tr>
<tr>
<td>4. Enforcement in the country of residence based on mutual recognition of evidence</td>
<td>5 - 10</td>
<td></td>
<td>5 - 6.5</td>
<td>10 - 16.5</td>
</tr>
<tr>
<td>5. Convergence of enforcement practices. cross-border co-operation (as in option 4)</td>
<td>5 - 10</td>
<td>130</td>
<td>21 - 22.5</td>
<td>156 - 162.5</td>
</tr>
<tr>
<td>Total (both actions)</td>
<td>5 - 10</td>
<td>130</td>
<td>26 - 29</td>
<td>166 - 179</td>
</tr>
</tbody>
</table>

6.2.3. Results of the weighing

In order to determine the road safety effect, the related road deaths and the potential reduction of each policy have been assessed. For this purpose it has been assumed that the percentage of speeding related to road deaths caused by non-residents is similar to the percentage of non-resident offences, which lies between 4% and 15% (with 7% as average).

---

42 Video Enforcement for Road Authorities (VERA), project co-funded by the European Commission.
The potential reduction of each policy has been defined as the extent to which drivers are expected to change their behaviour and comply with traffic regulations. The Impact Assessment evaluates what this means in terms of numbers of saved lives.

– In option 2, non-resident offenders are prosecuted on return to the country of offence, based on details of car owners provided by residence countries through formal co-operations between the relevant authorities.

For this option, the related road fatalities are about 400 and the effect is expected to be rather small, with speeding reduction around 5%.

– In option 3, an information exchange system is established at EU level to identify the car owners to whom notifications of offences will be sent. The legal prosecution of traffic offenders is carried out by the state where the offence has been committed.

For this option, the related road fatalities are about 400. All offenders will receive a penalty notification, upon identification of car owners' details through a common information exchange system, in a relatively short period of time which increases the deterrent effect. The potential impact on road deaths is assumed to be around 25%.

Total administrative costs will mainly cover the setting up of a system to exchange information. Based on data related to the recent implementation of TACHOnet, the total costs for all Member States could be € 5-10 million.

– In option 4, the legal prosecution of traffic offenders is carried out by the state where the vehicle, with which the offence has been committed, is registered.

For this option, the related road fatalities are about 400. The impact on drivers' behaviour is likely to be stronger, since the follow-up will not need to go through heavy inter-governmental procedures. The estimated decrease in the number of speeding related road deaths is expected to be around 60%.

Total administrative costs will cover the setting up of a system to exchange information. As in option 3, the total costs for all Member States could be € 5-10 million. One should add to this the costs of producing standards for type approval. Based on experience with other standardisation exercise, one can fairly assume costs below € 1 million for the whole Community. To a large extent, these costs can be borne by the European Commission from dedicated budgets.

– In option 5, the cross-border cooperation as provided for in option 4 is combined with minimum requirements for the quality and the intensity of enforcement practices.

For this option, the target group is estimated at 25,000 road deaths (taking into account that there is an overlap in the 3 problem areas, speeding, drink-driving and seatbelts). The overall level of enforcement is increased, for both offences committed by resident drivers and by non-resident drivers. The effectiveness of this higher level of enforcement differs by Member State as it depends on the current level of enforcement and the possible increase. The effect of increased enforcement in this option may be assessed to an additional reduction in related road deaths of 30%.

Administrative costs will cover the setting up of a system to exchange information. As in option 3 and 4, these costs could be € 5-10 million for all Member States.
In this option, additional enforcement costs need to be made to achieve the minimum standards on enforcement in the Member States with presently lower levels of enforcement. The additional administrative costs for policy option 5 have been assessed to be around € 130 million.

6.2.4. Added value of EU action

The Community has to justify its actions in terms of the additional value they might have over actions of individual Member States. The principle has been formally embodied in successive versions of the Treaty and was introduced using two general criteria: subsidiarity and proportionality.

– Principle of subsidiarity

The principle of subsidiarity means that the Commission shall only take actions in areas which do not fall within its exclusive competence in case the objectives cannot be sufficiently achieved by the Member States, or if – by reason of scale or effect – the objectives can better be achieved at the Community level.

Cross-border enforcement focuses on the increasing international flows of transport, and falls outside the competence of the different Member States as they cannot prosecute offenders outside their territories. Cooperation between Member States is therefore needed to make cross-border enforcement work.

A basic condition for creating added value (i.e. saving additional lives) is that the Community intervention is complementary to, and coherent with interventions at other levels: there should be synergy between interventions at national and EU level. A legislative proposal to enable cross-border enforcement and to establish appropriate guidelines on the enforcement practices should be complementary and coherent with both national plans and other EU plans.

– Principle of proportionality

The principle of proportionality states that any action by the Community shall not go beyond what is necessary to achieve the objectives of the Treaty. It has been recognized that enforcement is one of the key issues in further improving road safety in order to reach the objectives of the White Paper.\footnote{European transport policy for 2010: time to decide - COM(2001) 370, 12.9.2001.} The proposal should be complementary to the existing Council Framework Decision 2005/214/JHA on the application of the principle of mutual recognition to financial penalties.

6.2.5. Proposed action

The assessment of the options show that maintaining the current situation as well as taking non-regulatory measures would mean that existing problems on road safety enforcement would be unresolved. The results of the impact assessment and the public consultation indicate that actions are needed on both issues, cross-border enforcement and efficient enforcement practices in the Member States.
At the EU level, the Council framework decision on the application of the principle of mutual recognition of financial penalties could contribute to some extent to improving the current situation. This instrument in the field of police and judicial cooperation in criminal matters based on the Treaty on European Union, deals with mutual recognition of final decisions requiring a financial penalty to be paid. It allows a competent authority to send, for execution, a financial penalty issued against a natural or legal person to a Member State where the person has property, income or is normally resident (or registered). It covers a wide range of offences including infringements of road traffic regulations. However, this instrument only applies to final decisions, whereas the phases between recording of the offence up to the final decision are not covered. In these phases, specific regulatory means are needed to achieve efficient practical co-operation between enforcement authorities in the field of traffic offences.

Considering the assessment of the options on improved enforcement practices in the Member States, the proposal should include appropriate administrative and technical mechanisms for these phases as well as guidelines on improved enforcement practices. Option 5 brings about more social, economic and environmental benefits than the other options (social: less people killed and injured on the roads; economic: important financial benefits because of less accidents, thus less personal and material damage, and through financial penalties; environmental: because of less speeding, thus less pollution and less fuel consumption).

However, in the present stage of development of Community law, option 5 is not practicable because, on substance, it is contrary to the principle of subsidiarity and, on procedure, it overlaps with the Council Framework Decision 2005/214/JHA on the application of the principle of mutual recognition to financial penalties. The proposal is therefore based on option 3.

6.2.6. Comparing benefits and costs

Table 4: Benefits and costs

Source: Ecorys I.A. Study (2006)

<table>
<thead>
<tr>
<th>Option</th>
<th>Total Costs (Investment + 1 year)</th>
<th>Safety effect (million €, per annum)</th>
<th>Ratio benefits to costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Structured best practices, decentralised enforcement</td>
<td>6 - 8</td>
<td>18 - 30</td>
<td>2.5 - 3.0</td>
</tr>
<tr>
<td>3. EU-wide information exchange system - enforcement in the country of offence</td>
<td>11 - 18</td>
<td>88 - 100</td>
<td>5.5 - 8.0</td>
</tr>
<tr>
<td>4. Enforcement in the country of residence based on mutual recognition of evidence</td>
<td>10 - 16.5</td>
<td>210 - 240</td>
<td>14.5 - 21.0</td>
</tr>
<tr>
<td>5. Convergence of enforcement practices and cross-border co-operation</td>
<td>166 - 179</td>
<td>5.210 - 5.240</td>
<td>29.3 - 31.4</td>
</tr>
</tbody>
</table>

These results confirm findings from other studies. Two studies carried out in Norway in 2004 on an automated enforcement programme for speeding showed cost benefit ratios of 1 to 27 and 1 to 8.9. A study conducted in the UK in 2005 showed a ratio of 1 to 27. In the Netherlands, an assessment study on a mobile camera programme showed a ratio 1 to 3\textsuperscript{45}.

7. **MONITORING AND EVALUATION**

7.1. **Describing the objectives**

In order to define appropriate indicators for monitoring and evaluating the EU enforcement actions, the objectives have to be clearly described. These objectives need to be consistent with other EU policies and objectives. Different levels of objectives can be distinguished.

The general objective is to improve road safety within the Community, thereby contributing to an efficient and sustainable transport system.

The specific objective of Community action is to improve road behaviour by increasing compliance with traffic regulations on speeding, drink-driving and non use of seatbelts by both resident and non resident users. This can be achieved by increasing the chance/risk for offenders of being caught, thereby increasing road safety.

The operational objectives are related to specific outputs of Community action. They are concerned with:

- improving the quality of enforcement in Member States on speeding, drink-driving and non use of seatbelts. This includes the application of best practices in enforcement devices (automated speed cameras, random breath testing), in enforcement intensity (number of devices, frequency of actions, selection of road sections etc.) and in parallel actions to increase public awareness;

- converging of road traffic enforcement practices (types, frequency, location of enforcement) between Member States, ensuring that the chances to be caught for offences are more or less similar in the various Member States; this objective deals with practices and methods. The aim is not to harmonise rules and penalties;

- facilitating cross-border enforcement with the objective of reducing impunity of non resident offenders; the objective is also to have road traffic laws equally respected in all Member States and that drivers are not put in danger by a minority of drivers coming from another Member State who believe they can get away with illegal behaviour.

According to the Impact assessment guidelines, the objectives have been subject to a SMART-test which provides a tool for evaluating whether the objectives are Specific, Measurable, Achievable, Realistic and Time-dependent. This, in particular, applies to the operational and specific objectives, as the general objective is usually defined at a more aggregate and abstract level.

The following table gives a suggestion of how the above objectives could be made "SMART":

\textsuperscript{45} OCDE-CEMT, at footnote 26, p.184. The mentioned studies were conducted, respectively, by Elvik and Vaa (2004), Gains et al. (2005), Goldenberg and Van Schagen (2005).
### Table 5: SMART objectives

Source: Ecorys I.A. Study (2006)

<table>
<thead>
<tr>
<th>General aspect</th>
<th>Suggested objective (SMART)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Specific</strong></td>
<td></td>
</tr>
<tr>
<td>• Increase compliance with traffic regulations on speeding, drink-driving and non-use seatbelts by resident and non-resident drivers</td>
<td>Reduction in the number of road accidents involving speeding, drink-driving and/or non-use of seatbelts with 50% in 2010 (as compared to 2001)</td>
</tr>
<tr>
<td><strong>Operational</strong></td>
<td></td>
</tr>
<tr>
<td>• Improved quality of enforcement</td>
<td>Adoption of best practices in enforcement on speeding (automated speed cameras), drink-driving (random breath testing) and non-use of seatbelts by all Member States in 2010</td>
</tr>
<tr>
<td>• Harmonise traffic enforcement practices</td>
<td>Reduce differences in the number of devices and the frequency of enforcement actions between Member States to less than 20% in 2010</td>
</tr>
<tr>
<td>• Apply cross-border enforcement</td>
<td>Agreement on one cross-border systems for exchange of information, as well as follow-up procedures between Member States regarding non-resident offenders in 2010</td>
</tr>
</tbody>
</table>

7.2. **Defining the indicators**

Three levels of indicators relate to the three levels of objectives:

- **Outcome indicators** are expressed in terms of the ultimate desired impact. They are usually measured by global indicators and can be influenced by other objectives as well. In this case the outcome indicator should express the level of traffic safety. Therefore the indicator is the *number of fatalities and seriously injured in EU 27, related to speeding, drink-driving and non-use of seatbelts*. This indicator fits the objective of the EC road safety action program;

- **Result indicators** relate to the immediate objective of a policy. The target needs to be reached in order to achieve the general goal. They measure direct and short term effects of the policies and can also be influenced by other objectives. The immediate objective of this legislative proposal is to increase the compliance with traffic regulation by (non-)resident users. The result indicator is the *number of accidents in EU27 involving speeding, drink-driving and/or non use of seatbelts (involving non-resident drivers)*.

- **Output indicators** relate to the deliverables that the policy is expected to generate. The achievement is under direct control of the policy and can directly be verified. In this case the output indicators are:
  - Number of enforcement devices used
  - Frequency of enforcement actions
  - Number of public awareness campaigns
  - Number and spread of different enforcement practices (quality, frequency)
– Percentage of relevant bilateral country relations covered by bi- or multilateral agreements on enforcement

– Number of Member States taking part in a common system of cross-border enforcement

– Percentage of traffic offences
  • on speeding, drink-driving and non-use of seatbelts
  • by residents and non-residents
  • followed up or not

7.3. Overview of objectives and indicators

The guidelines for impact assessment require that indicators should comply with the RACER-test, in that they are Relevant, Accepted, Credible, Easy and Robust. The following table gives indicators on each of these three levels, which are compliant with this test.
Table 6: RACER objectives and indicators

Source: Ecorys I.A. Study (2006)

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td><strong>Outcome</strong></td>
</tr>
</tbody>
</table>
| • Increase traffic safety | • Number of **fatalities** and seriously injured in EU27  
  o related to speeding, drink-driving and non-use of seatbelts;  
  o related to non-resident drivers |
| **Specific** | **Result** |
| • Increase compliance with traffic regulations on speeding, drink-driving and non-using seatbelts by resident and non-resident drivers | • Number of **accidents** in EU27  
  o involving speeding, drink-driving and/or non-use of seatbelts  
  o involving non-resident drivers |
| **Operational** | **Output** |
| • Improved quality of enforcement | • Number of enforcement devices used  
  • Frequency of enforcement actions  
  • Number of public awareness campaigns |
| • Harmonise traffic enforcement practices | • Number and spread of different enforcement practices  
  (quality, frequency) |
| • Apply cross-border enforcement on speeding, drink-driving and non use of seatbelts | • Percentage of relevant bilateral country relations covered by bi- or multilateral agreements on enforcement  
  • Number of Member States taking part in a common system of cross-border enforcement  
  • Percentage of traffic offences  
  o on speeding, drink-driving and non-use of seatbelts  
  o by residents and non-residents  
  o followed up or not |