PROJECT

PEPPER

Police Enforcement Policy and Programmes on European Roads

Funding: European (6th RTD Framework Programme)
Duration: Mar 2006 - Aug 2008
Status: Complete with results
Total project cost: €3,872,990
EU contribution: €2,085,286

Call for proposal: FP6-2004-TREN-3
CORDIS RCN: 85616

Background & policy context:

The European Union has set out in the 2001 White Paper on transport policy an ambitious goal of halving the number of traffic fatalities over the period of 2000-2010 (European Commission, 2001). The goal was confirmed in 2003 in the Road Safety Action Programme. The White Paper identified a number of principal lines of activity for achieving the target including:

- harmonisation of penalties; and
- promotion of new technologies to improve road safety.

Traffic enforcement and its mechanism have figured as a subject of research since the late 1940s. Then, the objective of traffic enforcement was 'to implant a feeling of ever-present surveillance by highway patrols' (Irby & Jacobs, 1960), the essential term being 'the feeling of presence' rather than the actual presence of the police. The subjective factor, 'feeling' in the concept of deterrence, was probably first introduced explicitly as subjective risk of detection in the mid-1960s by Brehmer (1966). Enforcement even today is leaning largely on the conception of deterrence, even though the view of deterrence and methods to maintain it have evolved during the past decades.

Over the years, a lot of useful information and knowledge has accumulated for developing effective enforcement strategies and tactics. The partners, representing all major traffic safety research institutes in Europe have participated in a number of scientific projects contributing to a common enforcement knowledge base.

In many of the European transport safety policies, there are a safety targets expressed in quantitative terms. Also, included are a number of possible measures in order to meet the targets. The work in PEPPER identifies these needs by providing decision makers with:

- Tools to implement conventional and innovative safety measures in the field of enforcement,
- Ways of prioritising different enforcement methods and safety measures, and
- A proposal and a conceptual model to assess the deployment and impacts of enforcement on a European level, and also the adoption of the Commission Recommendation on Enforcement in the Field of Road Safety.

Objectives:

The objective of the PEPPER project was to enhance the effectiveness and efficiency of the police enforcement of road traffic. The project looks critically at all relevant aspects of enforcement, such as target behaviours, the detection of infringements, administrative and legal handling after infringement, decisions concerning the volume, location and timing of enforcement, effects of enforcement on road-user behaviour and accidents, enforcement methods and tools, collection of enforcement data, and
enforcement in the social context. Speeding, drink driving and use of seatbelts are especially targeted.

The need for improved enforcement data and better understanding of the impacts is recognised, and the potential of innovative technologies in the different links of the enforcement chain is studied. The PEPPER project aimed to enhance the effectiveness and efficiency of the police enforcement of road traffic. More specifically, the project aimed to:

- Describe and analyse the way Traffic Law Enforcement (TLE) functions in Member States and how it contributes to national road safety work.
- Explore different stakeholders’ views of traffic enforcement in Member States and EU.
- Develop enforcement data collection systems and databases for monitoring of the use of enforcement resources and describing the impacts on road user behaviour and road safety. Identify the data needs of the police for strategic and tactical planning of operations. Conduct pilot studies in order to test the availability of comparable European wide traffic enforcement data.
- Explore and analyse possibilities of advanced technology such as machine vision, positioning technologies and new wireless technologies in the detection of violations, traffic enforcement data transfer and communication, paying attention to cost-effectiveness and cross-border enforcement.
- Evaluate the impacts of enforcement on road user behaviour and accidents. Explore and make recommendations for good practices in Traffic Law Enforcement based on scientific analysis of the effects. Analyse the cost-effectiveness of various enforcement methods. Develop indicators for the effectiveness of Traffic Law Enforcement.

**Methodology:**

The technical work was organised in five work packages (WP):

- WP1 (Strategic, legal, administrative and social context of TLE) studied the role of enforcement in traffic safety policies, and analysed the roles of different stakeholders. The results indicate how the enforcement chain could be strengthened.
- WP2 (Model for enforcement data collection systems and associated pilots) developed models for strategic enforcement monitoring databases. The results serve the development of enforcement methods and monitoring and planning of enforcement.
- WP3 (Innovative technologies and approaches for improving compliance with traffic laws) studied the possibilities and cost-benefit ratio of modern machine vision and communication technologies in enforcement.
- WP4 (Good practices in traffic enforcement) defined good practices in traffic enforcement by studying current practices, producing scientific estimates of the effectiveness and efficiency of different enforcement methods, assessing monitoring and evaluation methods and surveying current realities in Traffic Law Enforcement (TLE).
- WP5 (Dissemination) concentrated on spreading the results across relevant stakeholders in Europe. New member states were targeted in particular.

**Related Projects:**

VERA2 - Video Enforcement for Road Authorities

**Parent Programmes:**

FP6-SUSTDEV - Sustainable Development, Global Change and Ecosystems - Priority Thematic Area 6 (PTA6)

**Institute type:** Public institution
**Institute name:** European Commission
**Funding type:** Public (EU)

**Lead Organisation:**

Technical Research Centre Of Finland

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Key Results:

The main results of Work package 1 (WP1) are described in three deliverables:

- The role of Traffic Law Enforcement policies in National and EU Road Safety Strategy (D2)
- Comparison and analysis of traffic Enforcement chains across EU Member States and in relation to EU policies (D6)
- Social support for Traffic Law Enforcement policies and practices within member states (D7)

The aim of WP2 ‘Model for enforcement data collection systems and associated pilots’ was to develop models for strategic enforcement monitoring databases. It is expected that the results will serve the development of enforcement methods and monitoring and planning of enforcement. The main results of WP2 are described in two Deliverables:

- Database structure for an enforcement data collection system on speeding, drink driving and restraint systems (D8)
- Conceptual model for the European traffic law enforcement database (D12)

Pilot studies of data collection system were organised in six Member States in order to clarify which variables can actually be used for monitoring the efficiency of the enforcement chain and to evaluate the enforcement performance indicators with regard to behaviour, accidents and fatalities. The focus was in the areas of speeding, drink-driving and use of seatbelts. Common templates were used for gathering enforcement data from different countries for different data types.

The model for the European traffic law monitoring database is capable of handling data concerning:

- actors related to enforcement in each country and their roles;
- national enforcement campaigns;
- key actors' opinion on enforcement measures;
- traffic enforcement technologies and aids;
- cross-border enforcement rules and best practices.

The main results of WP3 'Innovative technologies and approaches for improving compliance with traffic laws' are described in four deliverables:

- Innovative technology for monitoring traffic, vehicles and drivers (D1)
- Approaches and implications of new technologies for European cross-border traffic enforcement (D3)
- Implications of innovative technology for the key areas in traffic safety: speed, drink-driving and restraint systems (D10)
- A conceptual model concerning the deployment of positioning and location technology in traffic surveillance and enforcement (D11)

Innovative technologies and approaches f

Policy implications

EU policies on road safety and TLE were studied by analysing official documents concerning standards, directives, recommendations, actions, statements and communications. National road safety plans and traffic policing strategies were reviewed and updated with 2006-2008 information. Top police and road safety officials were interviewed and survey data concerning TLE policy and planning issues were analysed. TLE chains across EU Member States and in relation to EU policies were analysed on the basis of a questionnaire survey. The interest was on elements of planning, monitoring and evaluation, automated methods for violation registration, legal and administrative background, information campaigns and other driver awareness activities. Social support for Traffic Law Enforcement policies and practices within Member States was studied mainly on the basis of interviews of TLE professionals in seven countries and re-analysis of data from the SARTRE3 project.

In terms of strategic, legal, administrative and social context of Traffic Law Enforcement (TLE) in Member States, the main findings and conclusions were:

1. There is a universal recognition that TLE has an important role in maintaining legal and safe road
user behaviour, but also that it can and must be made more efficient and effective.

2. Most of the practices promoted by the 2004 EC Recommendation on Enforcement are indeed supported by most stakeholders in all Member States.

3. Massive traffic policing, as is advocated by the Recommendation, does not come cheaply.

Yet, only few Member States allocated special funding for the new, or more massive, policing activities their national safety strategies declared. There are growing trends in the EU to limit the size of police forces dedicated to traffic control.

Other implications are:

1. Drink-driving legislation and enforcement practices enjoy strong support from all stakeholders, in each state. There is also support for stronger sanctions.

2. Stakeholders like the idea of increased harmonisation of cross-border enforcement.

3. There is less agreement, within EU institutions and among stakeholders in Member States, about the legitimacy, feasibility, practicality or desirability, of having a top-down, EU mandated TLE policy that goes into specific tactical issues of how to do traffic policing.

4. Police forces have internal operational guidelines for tactical deployment of personnel, vehicles and equipment for traffic polici

Documents:

PEPPER Final Report (Deliverable 17)

STRIA Roadmaps: Other specified

Transport mode: Road transport

Transport sectors: Passenger transport, Freight transport Societal/Economic issues, Decarbonisation

Transport policies: Safety/Security

Geo-spatial type: Other